TRISHUL
METALS & ALLOYS
Sourcing & Procurement Solutions

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Stainless Steel Cataloge

Seamless Pipe & Tube
Welded Pipe & Tube
Thick-walled Pipe & Tube
Capillary Tube
Sanitary Pipe & Tube
Square Pipe & Tube
Rectangle Pipe & Tube
Coil Tube

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WHO WE ARE

Trishul & Its Founder

Trishul Metals & Alloys was established with a mission to become a trusted supplier of premium stainless steel products and materials.

Our founder, Govind Modi, brought together years of industry experience and a commitment to excellence in the metals and alloys sourcing business. Starting from a passion for quality and precision, we have built a company dedicated to providing comprehensive sourcing and procurement solutions for businesses across various industries.

Our initial focus on stainless steel has expanded to include a diverse range of alloys and specialized materials.

Mission

A roadmap without an articulate mission statement goes nowhere. A mission statement conveys to all the stakeholders the purpose and meaning of our existence as a company, based on which all our business decisions and actions are rationalized and conducted.

Our mission is to offer the best steel solutions and products in such a cost -effective way that each transaction concluded will take us closer to world civilization. As a steel company, we believe materials play a significant role in acceleration of human civilization. Each time new materials are developed, great inventions and disruptions take place. Cities emerge on the land, ships sail on the sea, and planes fly on the sky. None of these constructions can be completed without steel materials, be it carbon steel, stainless steel or super alloys. With this belief, we name our company Trishul Metals & Alloys, which means materials for civilization.

Vision

We are living in a constantly evolving world full of threats and opportunities. We contend with threats, we grab new opportunities and we keep expanding our business footprints worldwide ambitiously. It is no easy work. The past decade bears witness to the vicissitudes of steel industry, especially stainless steel. Competition grows intense, which turns the ever blue sea into red sea. To thrive as a steel materials business for decades to come, we must keep aware of changes, stay ahead of emerging trends and move swiftly. That's always our vision. It provides a roadmap for winning with you, all of our stakeholders.

Our vision defines our strategy to carry out our mission. We call it a hybrid strategy because it entails two parts : 1) product development and 2) market development.

While our company thrives on its initial stainless steel business, we have a considerable amount of old customers demand titanium and Special Alloy like duplex and super alloy. That's we how we increase our production line and pursue product development strategy. We also adopt market development strategy. With the development of new media and new technology, we will make our products and solutions accessible to more new markets.

Values

The today's business and the tomorrow's business will need our people to think, act and accomplish. Our values are integral to our corporate culture. It is set to help us weigh our business decisions, pursue excellent performance and create value. Trishul people are expected to embody "Trishul" spirits:

- **C**hallenger: Be a challenger and be a leader
- **I**ntegrity: Be honest and be real
- **V**isionary: Be far-sighted and forward -looking
- **M**aker: Make it happen
- **A**ccountability: Adopt an "it is up to me" attitude
- **T**eamwork: Work collaboratively
- **S**martness: Work hard and work smart

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Main Grades of Stainless Steel Pipe & Tube

304
AISI304, SUS304, S30400, 1.4301

C	Si	Mn	P	S	Ni	Cr	N	Fe
≤0.08%	≤0.75%	≤2.00%	≤0.045%	≤0.030%	8.0%~10.5%	18.0%~20.0%	≤0.10%	Remainder

304L
AISI304L, SUS304L, S30403, 1.4306

C	Si	Mn	P	S	Ni	Cr	N	Fe
≤0.03%	≤0.75%	≤2.00%	≤0.045%	≤0.030%	8.0%~12.0%	18.0%~20.0%	≤0.10%	Remainder

316
AISI316, SUS316, S31600, 1.4401

C	Si	Mn	P	S	Ni	Cr	Mo	N	Fe
≤0.08%	≤0.75%	≤2.00%	≤0.045%	≤0.030%	10.0%~14.0%	16.0%~18.0%	2.0%~3.0%	≤0.10%	Remainder

316L
AISI316L, SUS316L, S31603, 1.4404

C	Si	Mn	P	S	Ni	Cr	Mo	N	Fe
≤0.03%	≤0.75%	≤2.00%	≤0.045%	≤0.030%	10.0%~14.0%	16.0%~18.0%	2.0%~3.0%	≤0.10%	Remainder

321
AISI321, SUS321, S32100, 1.4541

C	Si	Mn	P	S	Ni	Cr	Ti	N	Fe
≤0.08%	≤0.75%	≤2.00%	≤0.045%	≤0.030%	9.0%~12.0%	17.0%~19.0%	5x(C%+N%)~0.70%	≤0.10%	Remainder

316Ti
AISI316Ti, SUS316Ti, S31635, 1.4571

C	Si	Mn	P	S	Ni	Cr	Mo	Ti	N	Fe
≤0.08%	≤0.75%	≤2.00%	≤0.045%	≤0.030%	10.0%~14.0%	16.0%~18.0%	2.0%~3.0%	5x(C%+N%)~0.70%	≤0.10%	Remainder

317L
AISI317L, SUS317L, S31726, 1.4438

C	Si	Mn	P	S	Ni	Cr	Mo	N	Fe
≤0.03%	≤0.75%	≤2.00%	≤0.045%	≤0.030%	11.0%~15.0%	18.0%~20.0%	3.0%~4.0%	≤0.10%	Remainder

310S
AISI310S, SUS310S, S31008, 1.4845

C	Si	Mn	P	S	Ni	Cr	Fe
≤0.08%	≤1.50%	≤2.00%	≤0.045%	≤0.030%	19.0%~22.0%	24.0%~26.0%	Remainder

347
AISI347, SUS347, S34700, 1.4550

C	Si	Mn	P	S	Ni	Cr	Nb	Fe
≤0.08%	≤0.75%	≤2.00%	≤0.045%	≤0.030%	9.0%~13.0%	17.0%~19.0%	10xC%~1.00%	Remainder

Main Grades of Stainless Steel Pipe & Tube

S31803
F51, SUS329J3L, 1.4462

C	Si	Mn	P	S	Ni	Cr	Mo	N	Fe
≤0.03%	≤1.00%	≤2.00%	≤0.030%	≤0.020%	4.5%~6.5%	21.0%~23.0%	2.5%~3.5%	0.08%~0.20%	Remainder

S32205
2205, SUS329J3L, F51, 1.4462

C	Si	Mn	P	S	Ni	Cr	Mo	N	Fe
≤0.03%	≤1.00%	≤2.00%	≤0.030%	≤0.020%	4.5%~6.5%	22.0%~23.0%	3.0%~3.5%	0.14%~0.20%	Remainder

S32750
2507, NAS74N, F53, 1.4410

C	Si	Mn	P	S	Ni	Cr	Mo	Cu	N	Fe
≤0.03%	≤0.80%	≤1.20%	≤0.035%	≤0.020%	6.0%~8.0%	24.0%~26.0%	3.0%~5.0%	≥0.50%	0.24%~0.32%	Remainder

904L
AISI904L, SUS904L, N08904, 1.4539

C	Si	Mn	P	S	Ni	Cr	Mo	Cu	N
≤0.02%	≤1.00%	≤2.00%	≤0.045%	≤0.035%	23.0%~28.0%	19.0%~23.0%	4.0%~5.0%	1.0%~2.0%	≤0.10%

254SMo
AISI254SMo, SUS254SMo, S31254, 1.4547

C	Si	Mn	P	S	Ni	Cr	Mo	Cu	N	
≤0.02%	≤0.80%	≤1.00%	≤0.030%	≤0.010%	17.5%~18.5%	19.5%~20.5%	6.0%~6.5%	0.5%~1.0%	≤0.10%	Remainder

17-4PH
AISI630, SUS630, S17400, 1.4542

C	Si	Mn	P	S	Ni	Cr	Cu	Nb+Ta	Fe
≤0.07%	≤1.00%	≤1.00%	≤0.040%	≤0.030%	3.0%~5.0%	15.0%~17.5%	3.0%~5.0%	Nb+Ta: 0.15%~0.45%	Remainder

253MA
AISI253MA, SUS253MA, S30815, 1.4835

C	Si	Mn	P	S	Ni	Cr	Ce	Fe
0.05%~0.10%	1.40%~2.20%	≤2.00%	≤0.040%	≤0.030%	10.0%~12.0%	20.0%~22.0%	0.03%~0.08%	Remainder

301
AISI301, SUS301, S30100, 1.4319

C	Si	Mn	P	S	Ni	Cr	N	Fe
≤0.15%	≤1.00%	≤2.00%	≤0.045%	≤0.030%	6.0%~8.0%	16.0%~18.0%	≤0.10%	Remainder

302
AISI302, SUS302, S30200, 1.4318

C	Si	Mn	P	S	Ni	Cr	N	Fe
≤0.15%	≤0.75%	≤2.00%	≤0.045%	≤0.030%	8.0%~10.0%	17.0%~19.0%	≤0.10%	Remainder

Main Grades of Stainless Steel Pipe & Tube

304N
AISI304N, SUS304N1, S30451, 1.4315

C	Si	Mn	P	S	Ni	Cr	N	Fe
≤0.08%	≤2.00%		≤0.030%			18.0%~20.0%		Remainder
≤0.75%			≤0.045%		8.0%~10.5%		0.10%~0.60%	

304H
AISI304H, SUS304, S30409, 1.4948

C	Si	Mn	P	S	Ni	Cr	Fe
0.04%~0.10%	≤2.00%		≤0.030%			18.0%~20.0%	
≤0.75%			≤0.045%		8.0%~10.5%		Remainder

309S
AISI309S, SUS309S, S30908, 1.4833

C	Si	Mn	P	S	Ni	Cr	Fe
≤0.08%	≤2.00%		≤0.030%			22.0%~24.0%	
≤0.75%			≤0.045%		12.0%~15.0%		Remainder

310H
AISI310H, SUS310H, S31009, 1.4845

C	Si	Mn	P	S	Ni	Cr	Fe
0.04%~0.10%	≤2.00%		≤0.030%			24.0%~26.0%	
≤0.75%			≤0.045%		19.0%~22.0%		Remainder

316LN
AISI316LN, SUS316LN1, S31653, 1.4429

C	Si	Mn	P	S	Ni	Cr	Mo	N	Fe
≤0.03%	≤2.00%		≤0.030%			16.0%~18.0%	0.10%~0.60%		
≤0.75%			≤0.045%		10.0%~14.0%		2.0%~3.0%		Remainder

316H
AISI316H, SUS316H, S31609, 1.4436

C	Si	Mn	P	S	Ni	Cr	Mo	Fe
0.04%~0.10%	≤2.00%		≤0.030%			16.0%~18.0%		Remainder
≤0.75%			≤0.045%		10.0%~14.0%		2.0%~3.0%	

321H
AISI321H, SUS321H, S32109, 1.4541

C	Si	Mn	P	S	Ni	Cr	Ti	Fe
0.04%~0.10%	≤2.00%		≤0.030%			17.0%~19.0%		Remainder
≤0.75%			≤0.045%		9.0%~12.0%		4x(C%+N%)~0.70%	

347H
AISI347H, SUS347H, S34709, 1.4912

C	Si	Mn	P	S	Ni	Cr	Nb	Fe
0.04%~0.10%	≤2.00%		≤0.030%			17.0%~19.0%		Remainder
≤0.75%			≤0.045%		9.0%~13.0%		8xC%~1.00%	

S32760
F55, 1.4501

C	Si	Mn	P	S	Ni	Cr	Mo	Cu	W	N	Fe
≤0.03%	≤1.00%		≤0.010%			24.0%~26.0%	0.50%~1.00%		0.20%~0.30%		
≤1.00%			≤0.030%		6.0%~8.0%		3.0%~4.0%	0.50%~1.00%			Remainder

Main Grades of Stainless Steel Pipe & Tube

S32304
2304, DP11, 1.4362

C	Si	Mn	P	S	Ni	Cr	Mo	Cu	N	Fe
≤0.03%	≤2.50%		≤0.030%			21.5%~24.5%	0.05%~0.60%			Remainder
≤1.00%			≤0.040%		3.0%~5.5%		0.05%~0.60%		0.05%~0.20%	

S32550
255, SUS329J4L, QSA2505, 1.4507

C	Si	Mn	P	S	Ni	Cr	Mo	Cu	N	Fe
≤0.04%	≤1.50%		≤0.030%			24.0%~27.0%		1.50%~2.50%		Remainder
≤1.00%			≤0.040%		4.5%~6.5%		2.9%~3.9%		0.10%~0.25%	

S32900
329, SUS329J1, 1.4477

C	Si	Mn	P	S	Ni	Cr	Mo	Fe
≤0.08%	≤1.00%		≤0.030%			23.0%~28.0%		Remainder
≤0.75%			≤0.040%		2.0%~5.0%		1.0%~2.0%	

S32950
F52

C	Si	Mn	P	S	Ni	Cr	Mo	N	Fe
≤0.03%	≤2.00%		≤0.010%			26.0%~29.0%	0.15%~0.35%		
≤0.60%			≤0.035%		3.5%~5.2%		1.0%~2.5%		Remainder

926
AISI926, SUS926, N08926, 1.4529

C	Si	Mn	P	S	Ni	Cr	Mo	Cu	N
≤0.02%	≤2.00%		≤0.010%			19.0%~21.0%		0.5%~1.5%	
≤0.50%			≤0.030%		24.0%~26.0%		6.0%~7.0%		0.15%~0.25%

654SMo
AISI654SMo, SUS654SMo, S32654, 1.4652

C	Si	Mn	P	S	Ni	Cr	Mo	Cu	N
≤0.02%	19.5%~20.5%		≤0.005%			24.0%~25.0%		0.3%~0.6%	
≤0.50%			≤0.030%		21.0%~23.0%		7.0%~8.0%		0.45%~0.55%

17-7PH
AISI631, SUS631, S17700, 1.4568

C	Si	Mn	P	S	Ni	Cr	Al	Fe
≤0.08%	≤1.00%		≤0.030%			16.0%~18.0%		Remainder
≤0.75%			≤0.040%		6.0%~7.7%		0.75%~1.0%	

PH15-7Mo
AISI630, SUS630, S15700, 1.4542

C	Si	Mn	P	S	Ni	Cr	Mo	Al	Fe
≤0.08%	≤1.00%		≤0.030%			14.0%~16.0%	0.75%~1.0%		
≤0.75%			≤0.040%		6.0%~7.7%		2.0%~3.0%		Remainder

15-5PH
S15500

C	Si	Mn	P	S	Ni	Cr	Cu	Nb	Ta	Fe
≤0.07%	≤1.00%		≤0.030%			14.0%~15.5%		Nb+Ta: 0.15%~0.45%		
≤1.00%			≤0.040%		3.5%~5.5%		2.5%~4.5%			Remainder

Main Grades of Stainless Steel Pipe & Tube

410

AISI410, SUS410, S41000, 1.4006

C	Si	Mn	P	S	Ni	Cr	Fe
0.08%~0.15%	≤1.00%	≤1.00%	≤0.030%		11.5%~13.5%		
	≤1.00%		≤0.040%		≤0.75%		Remainder

410S

AISI410S, SUS410S, S41008, 1.4000

C	Si	Mn	P	S	Ni	Cr	Fe
≤0.08%	≤1.00%	≤1.00%	≤0.030%		11.5%~13.5%		
	≤1.00%		≤0.040%		≤0.6%		Remainder

420

AISI420, SUS420J1, SUS420J2, 1.4021, 1.4028, S42000

C	Si	Mn	P	S	Cr	Fe
≥0.15%	≤1.00%	≤1.00%	≤0.030%			Remainder
	≤1.00%		≤0.040%		12.0%~14.0%	

420F

AISI420F, SUS420F, S42020, 1.4029

C	Si	Mn	P	S	Ni	Cr	Cu	Fe
0.30%~0.40%	≤1.50%		0.20%~0.34%			12.5%~14.0%		Remainder
	≤1.00%		≤0.060%		≤0.50%		≤0.60%	

431

AISI431, SUS431, S43100, 1.4057

C	Si	Mn	P	S	Ni	Cr	Fe
≤0.20%	≤1.00%	≤1.00%	≤0.030%			15.0%~17.0%	
	≤1.00%		≤0.040%		1.25%~2.50%		Remainder

440A

AISI440A, SUS440A, S44002

C	Si	Mn	P	S	Cr	Mo	Fe
0.60%~0.75%	≤1.00%	≤1.00%	≤0.030%			≤0.75%	
	≤1.00%		≤0.040%		16.0%~18.0%		Remainder

440B

AISI440B, SUS440B, S44003, 1.4112

C	Si	Mn	P	S	Cr	Mo	Fe
0.75%~0.95%	≤1.00%	≤1.00%	≤0.030%			≤0.75%	
	≤1.00%		≤0.040%		16.0%~18.0%		Remainder

440C

AISI440C, SUS440C, S44004, 1.4125

C	Si	Mn	P	S	Cr	Mo	Fe
0.95%~1.20%	≤1.00%	≤1.00%	≤0.030%			≤0.75%	
	≤1.00%		≤0.040%		16.0%~18.0%		Remainder

409(L)

AISI409, AISI409L, SUH409, SUH409L, S40900, 1.4512

C	Si	Mn	P	S	Ni	Cr	Ti	Nb	N	Fe
≤0.03%	≤1.00%	≤1.00%	≤0.020%			10.5%~11.7%		≤0.50%		Remainder
	≤1.00%		≤0.040%		≤0.50%		6x(C%+N%)~0.50%		≤0.10%	

Main Grades of Stainless Steel Pipe & Tube

430

AISI430, SUS430, S43000, 1.4016

C	Si	Mn	P	S	Ni	Cr	Fe
≤0.12%	≤1.00%	≤1.00%	≤0.030%			16.0%~18.0%	
	≤1.00%		≤0.040%		≤0.75%		Remainder

434

AISI434, SUS434, S43400, 1.4113

C	Si	Mn	P	S	Cr	Mo	Fe
≤0.12%	≤1.00%	≤1.00%	≤0.030%			0.75%~1.25%	
	≤1.00%		≤0.040%		16.0%~18.0%		Remainder

436

AISI436, SUS436, S43600, 1.4536

C	Si	Mn	P	S	Cr	Mo	Nb	Fe
≤0.12%	≤1.00%	≤1.00%	≤0.030%			0.75%~1.25%		Remainder
	≤1.00%		≤0.040%		16.0%~18.0%		5*C%~0.8%	

439

AISI439, SUS430LX, S43035, 1.4510

C	Si	Mn	P	S	Ni	Cr	N	Fe
≤0.03%	≤1.00%	≤1.00%	≤0.030%			17.0%~19.0%		Remainder
	≤1.00%		≤0.040%		≤0.50%		≤0.030%	

444

AISI444, SUS444, S44400, 1.4521

C	Si	Mn	P	S	Ni	Cr	Mo	Ti	Nb	N	Fe
≤0.25%	≤1.00%	≤1.00%	≤0.030%			17.5%~19.5%		Ti+Nb: [0.20+4x(C%+N%)]~0.80%			Remainder
	≤1.00%		≤0.040%		≤1.00%		1.75%~2.50%		≤0.030%		

TRISHUL
METALS & ALLOYS
Sourcing & Procurement Solutions

Seamless
Pipe&Tube

Specifications

• Outer Diameter: Φ4-Φ1219mm (Minimum - Maximum)
• Wall Thickness: 0.5-100mm (Minimum – Maximum)
• Length: 24000mm (Maximum)
• *Customized size needs to be confirmed with us

Standards

• American Standard: ASTM A312, ASME SA269, ASTM A269, ASME SA213, ASTM A213, ASTM A511, ASTM A789, ASTM A790
• Germany Standard: DIN2462.1-1981, DIN17456-85, DIN17458-85
• Japanese Standard: JIS G3463-2006, JIS G3459-2012
• Russian Standard: GOST 9941-81
• GB Standard: GB14975, GB14976, GB95, GB13296, GB5310, GB9948, GB/T12771

Applications

Home appliances, electric appliances, construction materials, medical equipment, auto parts, petroleum, chemical application, agricultural irrigation, edible oil refinery factories, paper plants, shipyard, nuclear power plant etc.

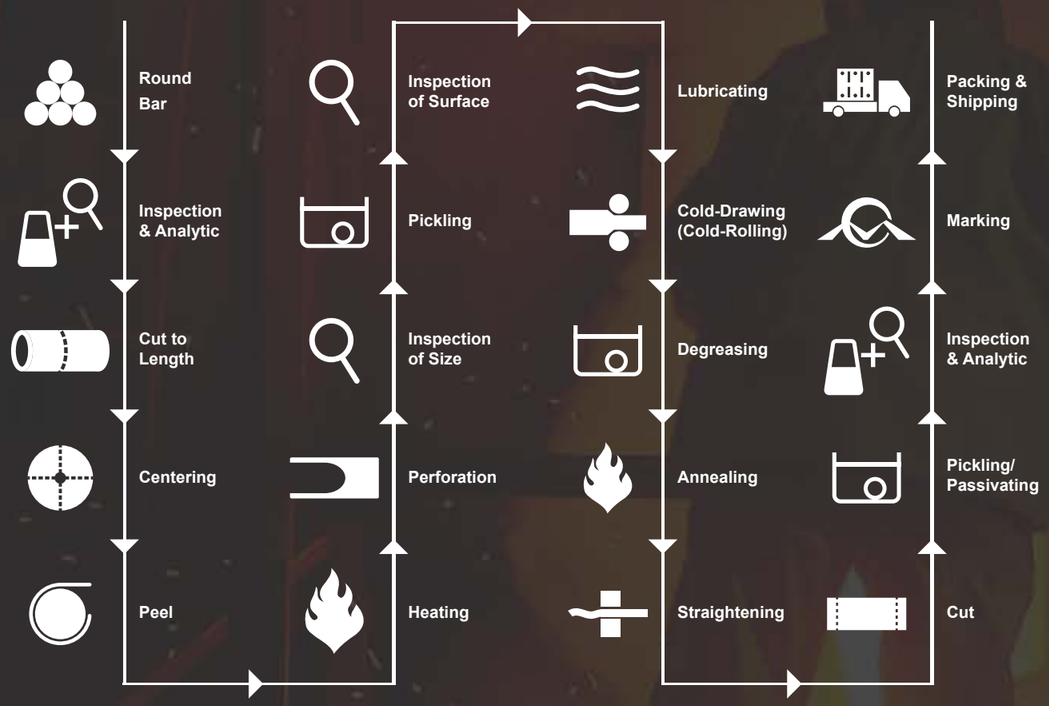
Introduction

Trishul Manufacture and supplies a wide range of stainless steel seamless pipes & tubes. The supply of our SS seamless pipes & tubes comes with multiple sizes and various grades which are both customizable. Choose Trishul and find the best stainless steel seamless pipes & tubes.
Trishul boasts its production capacity of stainless steel seamless pipe tube, roughly 2100 tons per month. As per your requirement, we can produce according to American Standard, Germany Standard, Japanese standard, Russian Standard as well as national GB standard. While the most commonplace is our Austenitic(316, 316L, 316Ti, 317L, 321, 321H, 347, 904L) stainless steel seamless pipe tube, which enjoys good reputation home and abroad, special mention should be given to special alloy seamless pipe, like 904L, S31803, S32205, Duplex, Super Duplex, Nickel Alloy, Monel, Inconel, Incoloy, Hastelloy. They are gaining momentum in international market for their good comprehensive performance, reasonable price and satisfactory customer buying experience. We welcome you for further consultation.

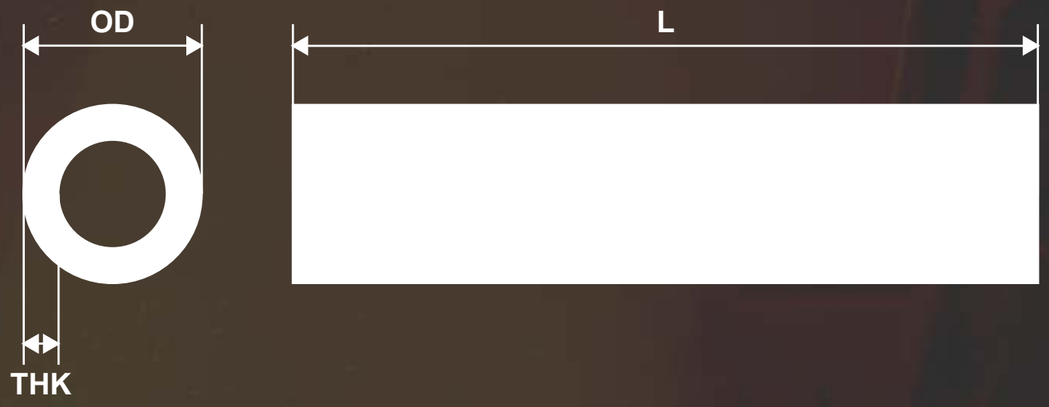
Features

Anti-corrosion (the degree is susceptible to the alloys contained), heat-resistance, good cold and hot working properties, good toughness, good comprehensive performances and wide application.

Manufacturing Process



Drawing & Formula



Formula:

m = (OD - THK) × THK (mm) × L (m) × 0.02491

* For 316, 316L, 310S, 309S, etc., ratio=0.02507

OD = Outer diameter, THK = Wall Thickness, L = Length

Tolerance

ASTM A312

NPS Designator	Tolerance, % from Nominal	
	Over	Under
⅛ to 2½ incl., all t/D ratios	20	12.5
3 to 18 incl., t/D up to 5% incl.	22.5	12.5
3 to 18 incl., t/D > 5%	15	12.5
20 and larger, welded, all t/D ratios	17.5	12.5
20 and larger, seamless, t/D up to 5% incl.	22.5	12.5
20 and larger, seamless, t/D > 5%	15	12.5

ASTM A269

Group	Size, Outside Diameter, in.	Permissible Variations in Outside Diameter, in. (mm)	Permissible Variations in Wall Thickness, %	Permissible Variations in Cut Length, in. (mm)		Thin Walled Tubes
				Over	Under	
1	Up to ½	±0.005(0.13)	±15	⅛(3.2)	0	...
2	½ to 1½, excl	±0.005(0.13)	±10	⅛(3.2)	0	less than 0.065 in. (1.65 mm) nominal
3	1½ to 3½, excl	±0.010(0.25)	±10	3/16(4.8)	0	less than 0.095 in. (2.41 mm) nominal
4	3½ to 5½, excl	±0.015(0.38)	±10	3/16(4.8)	0	less than 0.150 in. (3.81 mm) nominal
5	5½ to 8, excl	±0.030(0.76)	±10	3/16(4.8)	0	less than 0.150 in. (3.81 mm) nominal
6	8 to 12, excl	±0.040(1.01)	±10	3/16(4.8)	0	less than 0.200 in. (5.08 mm) nominal
7	12 to 14, excl	±0.050(1.26)	±10	3/16(4.8)	0	less than 0.220 in. (5.59 mm) nominal

ASTM A213

NPS [DN] Designator	Tolerance in %, from specified	
	Over	Under
⅛ to 2½ [6 to 65] incl., all t/D ratios	20	12.5
Above 2½ [65], incl, t/D ≤ 5%	22.5	12.5
Above 2½ [65], incl, t/D > 5%	15	12.5

Delivery State

Delivery State Choice	Surface Condition
HFD: Hot finished heat treated, descaled	Metallically Clean
CFD: Cold finished heat treated, descaled	Metallically Clean
CFA: Cold finished bright annealed	Metallically Bright
CFG: Cold finished heat treated, ground	Metallically bright-ground, the type and degree of roughness shall be agreed at the time of enquiry and order b
CFP: Cold finished heat treated, polished	Metallically bright-ground, the type and degree of roughness shall be agreed at the time of enquiry and order b

Note: 1. If you require different deliver state than the above listed, kindly confirm with us.
2. In case of any enquiry or order, please kindly let us know any extra requirement not indicated here.

Package

In Trishul, all of our stainless steel seamless pipes & tubes are packaged as per international standard to prevent any possible damage or loss. By default, we will use thick woven plastic bag to bundle the finished pipes together in batches. However, for some special pipes that are vulnerable to dirt, scratches, stress or rough handling, we will suggest wooden case for protection. Kindly note, wooden case can incur extra cost, not only its own cost, but also the increased freight cost, which is especially true for air transportation. For enhanced customer experience, we also provide dedicated package as per your special requirements.

Thick woven plastic bag

Wooden case

Logistics

By default, we will quote based on sea transportation, such as FOB, CFR, CIF and the like for most enquiries or orders. Quotation based on air transportation is also optional upon your request for urgent demands.

By sea

By air

Welded Pipe&Tube

TRISHUL
METALS & ALLOYS
Sourcing & Procurement Solutions

Specifications

• Outer Diameter: Φ6-Φ2800mm (Minimum - Maximum)
• Wall Thickness: 0.3-45mm (Minimum – Maximum)
• Length: 18000mm (Maximum)
• *Customized size needs to be confirmed with us

Standards

• American Standard: ASTM A312, ASTM A358, ASTM A249, ASTM A269, ASTM A554, ASTM A790
• European Standard: DIN 17457
• Japanese Standard: JIS G3459
• GB Standard: GB/T12770-2002, GB/T12771-2008

Applications

Industrial application such as petroleum, chemical, paper plant, sewage system, energy, dyeing workshop, mechanical and structural application, boiler heat exchange and others.

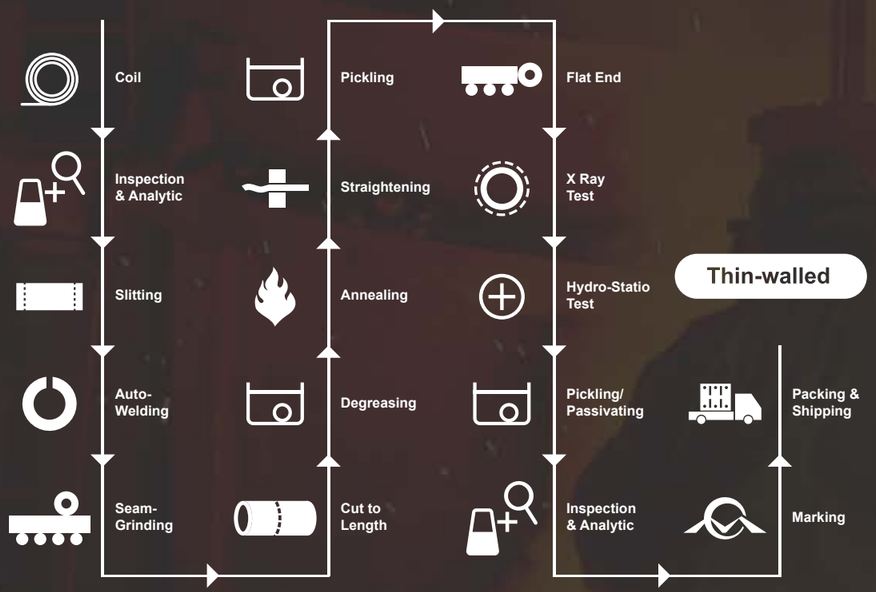
Introduction

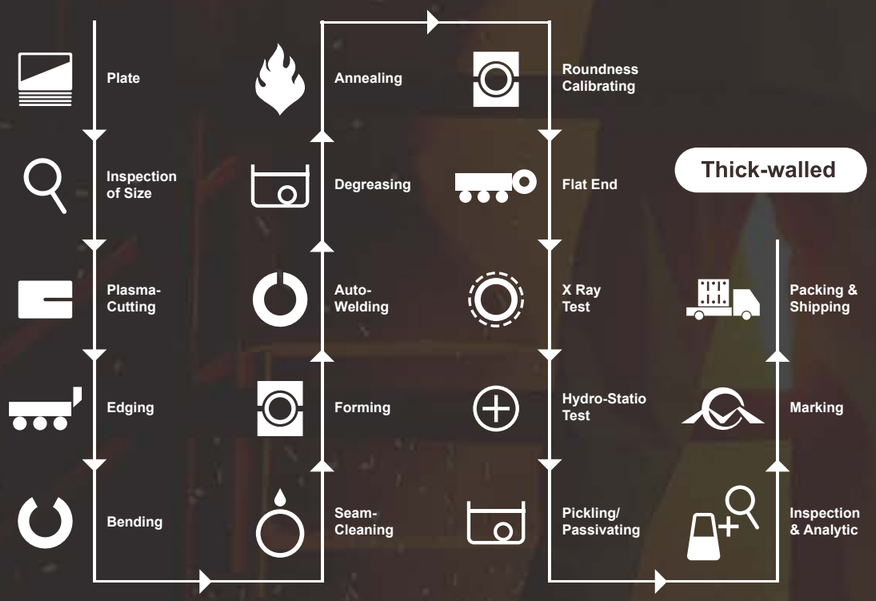
Trishul produces welded stainless steel pipe & tube in different shapes: round, square and rectangle. In comparison with seamless pipe, the lead time for stainless steel welded time is way shorter. For common welded pipes, whether common in grades (304, 304L, 316, 316L) or common in dimensions (SCH5S, SCH10S, SCH40, SCH80), we have huge stocks for your choices. It can take a week for port delivery. Other grades than the above mentioned such as 304H, 316H, 316Ti, 309S, 310S, 317L, 347, 321, duplex and nickel alloy, it can take longer time roughly two to three weeks to finish production. Have to mention, the above mentioned lead time is estimated as per our manufacturing experience. For accurate feedback, we encourage your confirmation with us to avoid discrepancy. In terms of quality control, our welded pipes are subjected to X-ray inspection, Hrdro inspection, PMI inspection and others upon your request. The production capacity of stainless steel welded pipe amounts to 1200 tons monthly.

Features

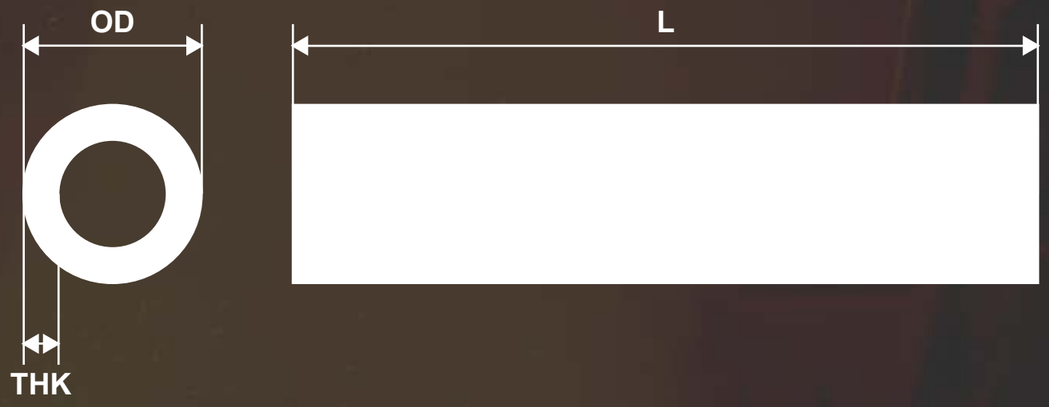
Anti-corrosion (the degree is susceptible to the alloys contained), heat-resistance, good cold and hot working properties, good toughness, good comprehensive performances and wide application.

Manufacturing Process





Drawing & Formula



Formula:

m = (OD - THK) × THK (mm) × L (m) × 0.02491

* For 316, 316L, 310S, 309S, etc., ratio=0.02507

OD = Outer diameter, THK = Wall Thickness, L = Length

Tolerance

ASTM A312

NPS Designator	Tolerance, % from Nominal	
	Over	Under
⅛ to 2½ incl., all t/D ratios	20	12.5
3 to 18 incl., t/D up to 5% incl.	22.5	12.5
3 to 18 incl., t/D > 5%	15	12.5
20 and larger, welded, all t/D ratios	17.5	12.5
20 and larger, seamless, t/D up to 5% incl.	22.5	12.5
20 and larger, seamless, t/D > 5%	15	12.5

ASTM A554

OD Size, in. (mm)	Wall Thickness		OD, ±	
	in.	mm	in.	mm
Under ½ (12.7)	0.020 to 0.049	0.51 to 1.24	0.004	0.1
½ to 1 (12.7 to 25.4)	0.020 to 0.065	0.51 to 1.65	0.005	0.13
½ to 1 (12.7 to 25.4)	over 0.065 to 0.134	over 1.65 to 3.40	0.01	0.25
Over 1 to 1½ (25.4 to 38.1), incl	0.025 to 0.065	0.64 to 1.65	0.008	0.2
Over 1 to 1½ (25.4 to 38.1), incl	over 0.065 to 0.134	over 1.65 to 3.40	0.01	0.25
Over 1½ to 2 (38.1 to 50.8), incl	0.025 to 0.049	0.64 to 1.24	0.01	0.25
Over 1½ to 2 (38.1 to 50.8), incl	over 0.049 to 0.083	over 1.24 to 2.11	0.011	0.28
Over 1½ to 2 (38.1 to 50.8), incl	over 0.083 to 0.149	over 2.11 to 3.78	0.012	0.3
Over 2 to 2½ (50.8 to 63.5), incl	0.032 to 0.065	0.81 to 1.65	0.012	0.3
Over 2 to 2½ (50.8 to 63.5), incl	over 0.065 to 0.109	over 1.65 to 2.77	0.013	0.33
Over 2 to 2½ (50.8 to 63.5), incl	over 0.109 to 0.165	over 2.77 to 4.19	0.014	0.36
Over 2½ to 3½ (63.5 to 88.9), incl	0.032 to 0.165	0.81 to 4.19	0.014	0.36
Over 2½ to 3½ (63.5 to 88.9), incl	over 0.165	over 4.19	0.02	0.51
Over 3½ to 5 (88.9 to 127.0), incl	0.035 to 0.165	0.89 to 4.19	0.02	0.51
Over 3½ to 5 (88.9 to 127.0), incl	over 0.165	over 4.19	0.025	0.64
Over 5 to 7½ (127.0 to 190.5), incl	0.049 to 0.250	1.24 to 6.35	0.025	0.64
Over 5 to 7½ (127.0 to 190.5), incl	over 0.250	over 6.35	0.03	0.76
Over 7½ to 16 (190.5 to 406.4), incl	all	all	0.00125 in./in. or mm/mm of circumference	

ASTM A269

Group	Size, Outside Diameter, in.	Permissible Variations in Outside Diameter, in. (mm)	Permissible Variations in Wall Thickness, %	Permissible Variations in Cut Length, in. (mm)		Thin Walled Tubes
				Over	Under	
1	Up to ½	±0.005(0.13)	±15	⅛(3.2)	0	...
2	½ to 1½, excl	±0.005(0.13)	±10	⅛(3.2)	0	less than 0.065 in. (1.65 mm) nominal
3	1½ to 3½, excl	±0.010(0.25)	±10	3/16(4.8)	0	less than 0.095 in. (2.41 mm) nominal
4	3½ to 5½, excl	±0.015(0.38)	±10	3/16(4.8)	0	less than 0.150 in. (3.81 mm) nominal
5	5½ to 8, excl	±0.030(0.76)	±10	3/16(4.8)	0	less than 0.150 in. (3.81 mm) nominal
6	8 to 12, excl	±0.040(1.01)	±10	3/16(4.8)	0	less than 0.200 in. (5.08 mm) nominal
7	12 to 14, excl	±0.050(1.26)	±10	3/16(4.8)	0	less than 0.220 in. (5.59 mm) nominal

Delivery State

Delivery State Choice	Surface Condition
Hot Rolled	Silver Bright
	Polished (320#, 400#, 600#, Mirror finish)
Cold Rolled	Silver Bright
	Polished (320#, 400#, 600#, Mirror finish)

Note: 1. If you require different deliver state than the above listed, kindly confirm with us.
2. In case of any enquiry or order, please kindly let us know any extra requirement not indicated here.

Package

In Trishul, all of our stainless steel welded pipes & tubes are packaged as per international standard to prevent any possible damage or loss. By default, we will use thick woven plastic bag to bundle the finished pipes together in batches. However, for some special pipes that are vulnerable to dirt, scratches, stress or rough handling, we will suggest wooden case for protection. Kindly note, wooden case can incur extra cost, not only its own cost, but also the increased freight cost, which is especially true for air transportation. For enhanced customer experience, we also provide dedicated package as per your special requirements.

Thick woven plastic bag

Wooden case

Logistics

By default, we will quote based on sea transportation, such as FOB, CFR, CIF and the like for most enquiries or orders. Quotation based on air transportation is also optional upon your request for urgent demands.

By sea

By air

Thick-walled Pipe&Tube

Specifications

• Outer Diameter: Φ10-Φ1219mm (Minimum - Maximum)
• Wall Thickness: SCH80S, SCH120, SCH160, XXS
• *Customized size needs to be confirmed with us

Standards

• American Standard: ASTM A312, ASME SA269, ASTM A269, ASME SA213, ASTM A213, ASTM A511, ASTM A789, ASTM A790, ASTM A376
• Germany Standard: DIN2462.1-1981, DIN17456-85, DIN17458-85
• European Standard: EN10216-5, EN10216-2
• Japanese Standard: JIS G3463-2006, JIS G3459-2012
• Russian Standard: GOST 9941-81
• GB Standard: GB14975, GB14976, GB95, GB13296, GB5310, GB9948, GB/T12771

Introduction

Thick-walled stainless steel pipe & tube, also named stainless steel hollow bar, are usually used for mechanical applications or manufacturing hollow components such as nozzles, reducers, couplings etc. These applications always require corrosion-resistant or high-temperature strength. Thick-walled stainless steel pipes can be furnished in different shapes such as round, square, rectangular etc. while hollow bars are produced in round shape. The most common standard applied for thick-walled stainless steel pipe or hollow bar is ASTM A511/A511M-16 which covers requirements for chemical compositions, mechanical properties and diameters. Civmats Co. Limited produces thick-walled stainless steel pipe strictly according to the standard under ISO 9001 system. Each product delivered from Civmats is a brand warrantee.

Features

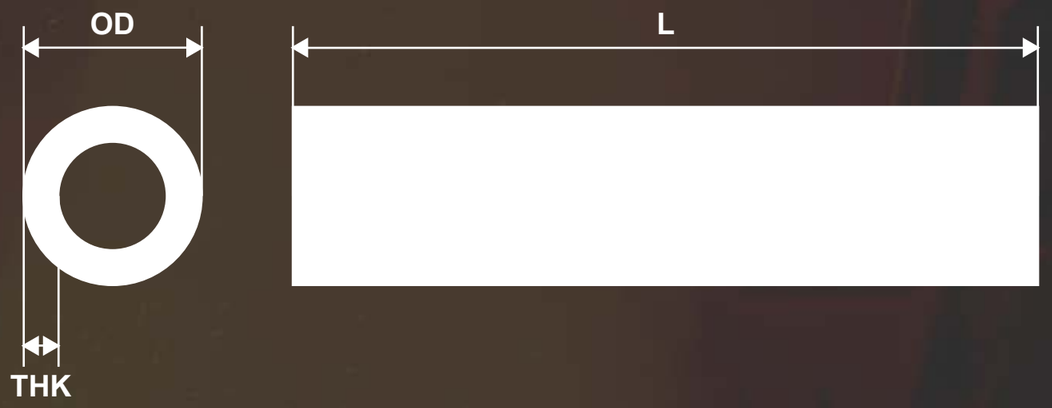
Anti-corrosion, high-pressure resistance, heat-resistance etc.

Applications

Industrial application such as petroleum, chemical, fertilizer plants, energy, machinery application, boiler heat exchange and others.

Manufacturing Process

Drawing & Formula



Formula:

m = (OD - THK) × THK (mm) × L (m) × 0.02491

* For 316, 316L, 310S, 309S, etc., ratio=0.02507

OD = Outer diameter, THK = Wall Thickness, L = Length

Size Range

Outer Diameter	Wall Thickness	Outer Diameter	Wall Thickness	Outer Diameter	Wall Thickness	Outer Diameter	Wall Thickness
1/8	1	1	5	15/8	6	7/2	12
1/8	1.5	1	6	15/8	8	4	3
1/8	2	9/8	2	2	2	4	3.5
1/4	1	9/8	2.5	2	2.5	4	4
1/4	1.5	9/8	3	2	3	4	5
1/4	2	9/8	3.5	2	3.5	4	6
3/8	1	9/8	4	2	4	4	8
3/8	1.5	9/8	5	2	5	4	10
3/8	2	9/8	6	2	6	4	12
3/8	2.5	5/4	2	2	8	5	4
3/8	3	5/4	2.5	2	10	5	5
7/16	2	5/4	3	2	12	5	6
7/16	2.5	5/4	3.5	9/4	2	5	8
7/16	3	5/4	4	9/4	2.5	5	10
7/16	3.5	5/4	5	9/4	3	5	12
7/16	4	5/4	6	9/4	3.5	6	4
1/2	2	11/8	2	9/4	4	6	5
1/2	2.5	11/8	2.5	9/4	5	6	6
1/2	3	11/8	3	9/4	6	6	8
1/2	3.5	11/8	3.5	9/4	8	6	10
1/2	4	11/8	4	9/4	10	6	12
5/8	2	11/8	5	9/4	12	8	4
5/8	2.5	11/8	6	5/2	3	8	5
5/8	3	3/2	2	5/2	3.5	8	6
5/8	3.5	3/2	2.5	5/2	4	8	8
5/8	4	3/2	3	5/2	5	8	10
3/4	2	3/2	3.5	5/2	6	8	12
3/4	2.5	3/2	4	5/2	8	10	6
3/4	3	3/2	5	5/2	10	10	8
3/4	3.5	3/2	6	5/2	12	10	10
3/4	4	3/2	8	3	3	10	12
3/4	5	7/4	2	3	3.5	12	10
3/4	6	7/4	2.5	3	4	12	12
7/8	2	7/4	3	3	5	14	10
7/8	2.5	7/4	3.5	3	6	14	12
7/8	3	7/4	4	3	8	16	10
7/8	3.5	7/4	5	3	10	16	12
7/8	4	7/4	6	3	12	18	10
7/8	5	7/4	8	7/2	3	18	12
7/8	6	15/8	2	7/2	3.5	20	10
1	2	15/8	2.5	7/2	4	20	12
1	2.5	15/8	3	7/2	5	24	10
1	3	15/8	3.5	7/2	6	24	12
1	3.5	15/8	4	7/2	8		
1	4	15/8	5	7/2	10		

Delivery State

Delivery State Choice	Surface Condition
HFD: Hot finished heat treated, descaled	Metallically Clean
CFD: Cold finished heat treated, descaled	Metallically Clean
CFA: Cold finished bright annealed	Metallically Bright
CFG: Cold finished heat treated, ground	Metallically bright-ground, the type and degree of roughness shall be agreed at the time of enquiry and order b
CFP: Cold finished heat treated, polished	Metallically bright-ground, the type and degree of roughness shall be agreed at the time of enquiry and order b
Note: 1. If you require different deliver state than the above listed, kindly confirm with us. 2. In case of any enquiry or order, please kindly let us know any extra requirement not indicated here.	

Package

In Trishul, all of our stainless steel thick-walled pipes & tubes are packaged as per international standard to prevent any possible damage or loss. By default, we will use thick woven plastic bag to bundle the finished pipes together in batches. However, for some special pipes that are vulnerable to dirt, scratches, stress or rough handling, we will suggest wooden case for protection. Kindly note, wooden case can incur extra cost, not only its own cost, but also the increased freight cost, which is especially true for air transportation. For enhanced customer experience, we also provide dedicated package as per your special requirements.

Thick woven plastic bag

Wooden case

Logistics

By default, we will quote based on sea transportation, such as FOB, CFR, CIF and the like for most enquiries or orders. Quotation based on air transportation is also optional upon your request for urgent demands.

By sea

By air

Capillary Tube

Specifications

• Outer Diameter: Φ0.4-Φ16.0mm (Minimum - Maximum)
• Wall Thickness: 0.1-2.0mm (Minimum – Maximum)
• Length: 18000mm (Maximum)
• *Customized size needs to be confirmed with us

Standards

• American Standard: ASTM A312, ASTM A358, ASTM A249, ASTM A269, ASTM A554, ASTM A790
• European Standard: DIN 17457
• Japanese Standard: JIS G3459
• GB Standard: GB/T12770-2002, GB/T12771-2008

Features

Fine softness, anti-corrosion, heat resistance, durability, good tensile properties, waterproofing, and good electromagnetic shielding properties.

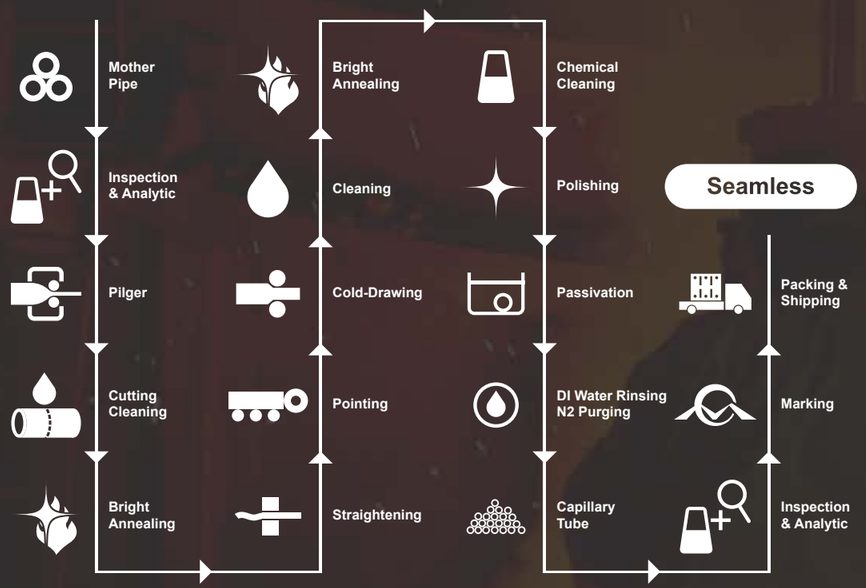
Introduction

Trishul produce high precision stainless steel capillary tubes with a tight tolerance of ±0.02mm under ISO 9001:2015. Our SS capillary tubes can be classified into four categories, AP tube, MP tube, BA tube and (Cleanroom) EP tube, among which BA tube and EP tube are the most popular and gain high recognition from different industrial applications, both home and abroad, due to high precision and greater corrosion resistance. For your reference, we can manufacture SUS 316L capillary tube containing 12 Nickel with enhanced corrosion resistance, particularly suitable for special applications such as high toxic gas. In most cases, TP 316L containing 10 Nickel will be sufficient for general corrosive services. The main ASTM standards we produce are ASTM A269, A270, A312, A554 and A249 for your divergent demands. At Trishul, the supply of our stainless steel capillary tubes comes in multiple dimensions and various grades. The main grades are 316(L), 304(L), 321(H), 309S and 310S. If you want non-standard size or grades not listed in our datasheet, we can customize for you upon our confirmation. For standard size of common grades, we have ex-stock for fast delivery. We can also provide small pieces of free samples upon your request for you to check quality. If you are interested in our stainless steel capillary tube, just call us or drop us an email, our sales will come to you shortly.

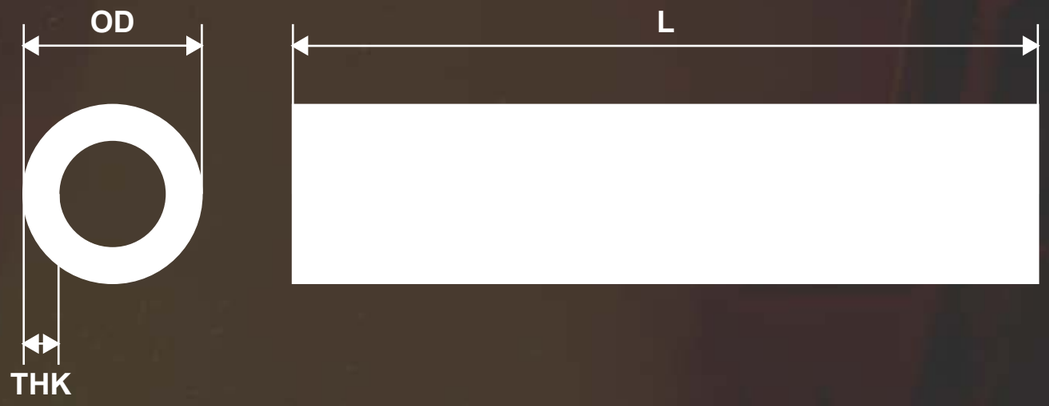
Applications

Automation instrument line, wire protection tube, inner support of high voltage cable, chemical, petroleum, medical equipment, decoration, kitchen ware, food machinery, pens, clock, fishing rod, etc.

Manufacturing Process



Drawing & Formula



Formula:

m = (OD - THK) × THK (mm) × L (m) × 0.02491

* For 316, 316L, 310S, 309S, etc., ratio=0.02507

OD = Outer diameter, THK = Wall Thickness, L = Length

Size & Tolerance

Size Range

Size	Size	Size	Size
0.4*0.11	1.6*0.15	2.5*0.75	4.5*0.5
0.5*0.15	1.6*0.2	2.5*0.8	4.5*1.0
0.6*0.15	1.6*0.25	2.55*0.13	4.7*1.0
0.63*0.15	1.6*0.3	2.55*0.8	5.0*0.2
0.7*0.15	1.6*0.4	2.6*0.2	5.0*0.25
0.8*0.125	1.7*0.15	2.8*0.2	5.0*0.3
0.8*0.15	1.7*0.25	3.0*0.15	5.0*0.35
0.9*0.15	1.8*0.11	3.0*0.2	5.0*0.5
1.0*0.1	1.8*0.125	3.0*0.25	5.0*1.0
1.0*0.125	1.8*0.15	3.0*0.3	5.0*1.5
1.0*0.135	1.8*0.2	3.0*0.5	5.5*0.2
1.0*0.15	2.0*0.125	3.2*0.2	6.0*1.5
1.0*0.16	2.0*0.15	3.2*0.5	6.0*0.8
1.1*0.115	2.0*0.2	3.4*0.2	6.0*2.0
1.1*0.12	2.0*0.25	3.5*0.2	6.35*0.3
1.1*0.125	2.0*0.3	3.5*0.25	6.35*0.35
1.1*0.135	2.0*0.4	3.5*0.5	6.35*0.5
1.1*0.14	2.0*0.5	3.5*1.0	6.35*0.7
1.1*0.15	2.0*0.7	3.5*1.2	6.35*0.8
1.1*0.2	2.1*0.5	3.7*0.2	6.35*1.25
1.2*0.1	2.1*0.55	3.7*0.25	6.35*1.65
1.2*0.125	2.1*0.65	3.8*0.2	6.35*1.8
1.2*0.135	2.1*0.7	3.8*0.25	6.35*0.89
1.2*0.15	2.2*0.2	4.0*0.2	6.35*1.24
1.2*0.2	2.2*0.3	4.0*0.25	6.35*1.65
1.3*0.1	2.2*0.6	4.0*0.35	6.5*0.3
1.3*0.11	2.2*0.8	4.0*0.4	6.5*0.4
1.3*0.12	2.3*0.2	4.0*0.5	6.5*0.5
1.3*0.125	2.3*0.25	4.0*0.7	6.5*0.6
1.3*0.15	2.5*0.18	4.0*1.0	7.0*0.2
1.3*0.3	2.5*0.2	4.2*0.25	7.0*0.3
1.4*0.15	2.5*0.25	4.4*0.25	7.0*0.5
1.4*0.2	2.5*0.3	4.4*0.4	7.0*1.0
1.4*0.25	2.5*0.4	4.5*0.2	8.0*0.2
1.45*0.1	2.5*0.5	4.5*0.25	8.0*0.5

1.5*0.125	2.5*0.55	4.5*0.3	9.52*0.89
1.5*0.15	2.5*0.6	5.5*0.25	9.52*1.24
1.5*0.2	2.5*0.7	5.5*0.3	9.52*1.65
1.5*0.25	3.0*0.6	5.5*0.5	9.52*2.03
1.5*0.4	3.0*0.7	5.5*1.0	12.7*1.24
1.55*0.325	3.0*0.9	6.0*0.15	12.7*1.65
1.6*0.1	3.0*1.0	6.0*0.2	12.7*2.03
1.8*0.25	3.0*1.2	6.0*0.25	15.88*1.24
1.8*0.4	3.1*0.55	6.0*0.3	15.88*1.65
1.9*0.15	3.18*0.71	6.0*0.5	
2.0*0.1	3.18*0.89	6.0*1.0	

Tolerance

Outside Diameter						Wall Thickness											
Tube		Pipe		MP/ BA/EP	AP	Tube(mm)				Pipe Schedule 5S			Pipe Schedule 10S		
Inch	Metric	A	Inch			T	MP/EP	BA	AP	T	MP/ BA/ EP	BA	T	MP/ BA/EP	BA
1/4				+0.1 -0.00	±0.30	1.00	+0.05 -0.00	+0.05 -0.00	±0.30						
3/8						1.00									
1/2						1.24	+0.01 -0.15	±0.1							
3/4						1.65									
1				±0.1		1.65									
	6			+0.1 -0.00		1.00	+0.05 -0.00	+0.05 -0.00							
	10					1.00									
	12					1.00	+0.01 -0.15	±0.1							
	19					1.50									
	23			±0.1		1.50									
		8A	1/4	±0.08	±10%					1.2	±0.12	±0.20	1.65	±0.15	±0.20
		10A	3/8	±0.10						1.2			1.65		±10%
		15A	1/2							1.65	±0.15		2.10	±0.21	
		20A	3/4							1.65			2.10		
		25A	1							1.65			2.80	±0.28	
		32A	1-1/4	±0.15						1.65			2.80		
		40A	1-1/2	±0.20						1.65			2.80		
		50A	2	±0.40						1.65			2.80		
		65A	2-1/2							2.1	±0.20	±10%	3.00	±0.30	
		80A	3							2.1			3.00		
		100A	4	±0.80						2.1			3.00		
		125A	5	±1.00						2.1	±0.28		3.40	±0.34	
		150A	6	±1.50						2.1			3.40		
		200A	8	±2.00						2.1			4.00	±0.40	

Delivery State

Delivery State Choice	Surface Condition
AP: Annealed and Pickled	Pickled
MP: Mechanically Polished	Polished
BA: Bright Annealed	Bright
EP: Electro-Polished	Polished

Note: 1. If you require different deliver state than the above listed, kindly confirm with us.
2. In case of any enquiry or order, please kindly let us know any extra requirement not indicated here.

Inside Diameter Surface Finish Level

Inside Surface Level	O.D.size	Ra(μinch)	Ry(μm)
AP	ALL	≤100	≤25
MP	139.8≤OD≤355.6	≤20	≤4.0
BA	6.35≤OD≤48.6	≤15	≤3.0
	48.6≤OD≤165.2	≤20	≤4.0
EP	6.35≤OD≤48.6	≤10	≤0.5
	48.6≤OD≤165.2	≤10	≤0.7

Particle Contribution Test

Inside Surface Level	Standard	
	Max Particle Size	Allowabel Particle No
AP	0.3μm	5/cf
MP	0.1μm	5/cf
BA	0.1μm	5/cf
EP	0.1μm	1/cf

Package

In Trishul, all of our stainless steel capillary tubes are packaged as per international standard to prevent any possible damage or loss. By default, we will use thick woven plastic bag to bundle the finished SS tubes together in batches. However, for some special tubes that are vulnerable to dirt, scratches, stress or rough handling, we will suggest wooden case for protection. Kindly note, wooden case can incur extra cost, not only its own cost, but also the increased freight cost, which is especially true for air transportation. For enhanced customer experience, we also provide dedicated package as per your special requirements.

Thick woven plastic bag

Wooden case

Logistics

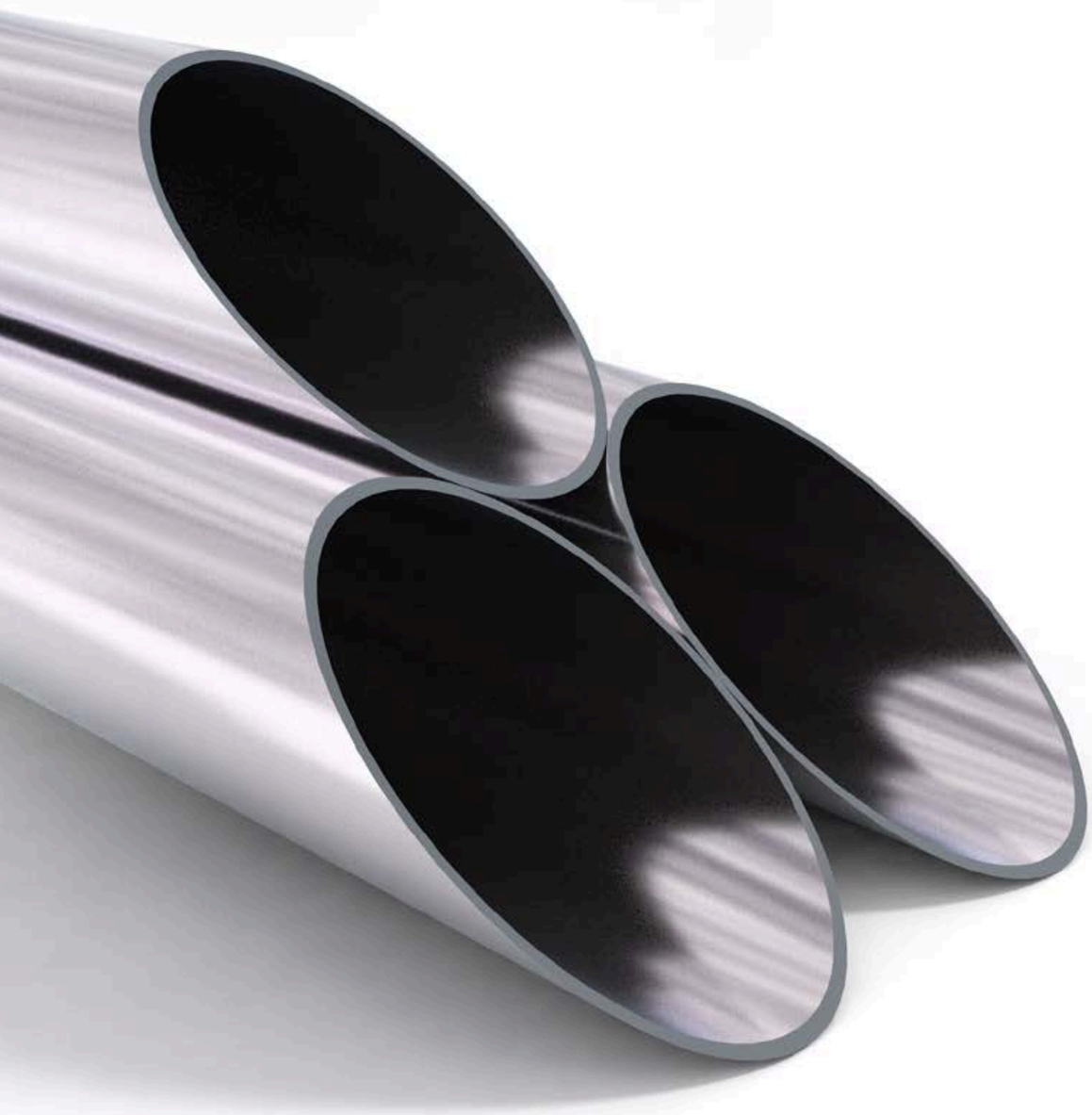
By default, we will quote based on sea transportation, such as FOB, CFR, CIF and the like for most enquiries or orders. Quotation based on air transportation is also optional upon your request for urgent demands.

By sea

By air

TRISHUL
METALS & ALLOYS
Sourcing & Procurement Solutions

Sanitary Pipe&Tube



Specifications

• 1) S.S. Welded Sanitary Pipe:
Outer Diameter: Φ8-Φ850mm (Minimum - Maximum)
Wall Thickness: 1-6mm (Minimum – Maximum)
• 2) S.S. Seamless Sanitary Pipe:
Outer Diameter: Φ6-Φ219mm (Minimum - Maximum)
Wall Thickness: 1-6mm (Minimum – Maximum)
• *Customized size needs to be confirmed with us

Standards

• American Standard: ASTM A312, ASME SA269, ASTM A269, ASME SA213, ASTM A213, ASTM A511, ASTM A789, ASTM A790, ASTM A376, ASME SA335, SB161, SB163, SB338, SB667/668
• Germany Standard: DIN2462.1-1981, DIN17456-85, DIN17458-85
• European Standard: EN10216-5, EN10216-2
• Japanese Standard: JIS G3463-2006, JIS G3459-2012
• Russian Standard: GOST 9941-81
• GB Standard: GB14975, GB14976, GB95, GB13296, GB5310, GB9948, GB/T12771

Introduction

As a leading Chinese stainless steel bar supplier, Tishul produce and manufacture a wide range of sanitary stainless steel pipes & tubes. The supply of our sanitary SS pipes & tubes comes with multiple sizes and various grades which are both customizable. Choose Trishul and find the best sanitary stainless steel pipes & tubes.
Trishul produces sanitary tubes that are widely applicable to food & beverage industry, pharmaceutical industry, chemical industry, and also cosmetics industry. Sanitary tubes can be produced into welded tubes or seamless tubes as per your request. Thin-walled sanitary tube are also available in both options. For welded sanitary tube, the dimensions can range from Φ8×1- Φ850×6, while for seamless sanitary tube, the sizes are Φ6×1- Φ219×6. The finish of seamless sanitary tube can achieve Ra ≤ 0.2-0.4 μm (400 grid to 800 grid).

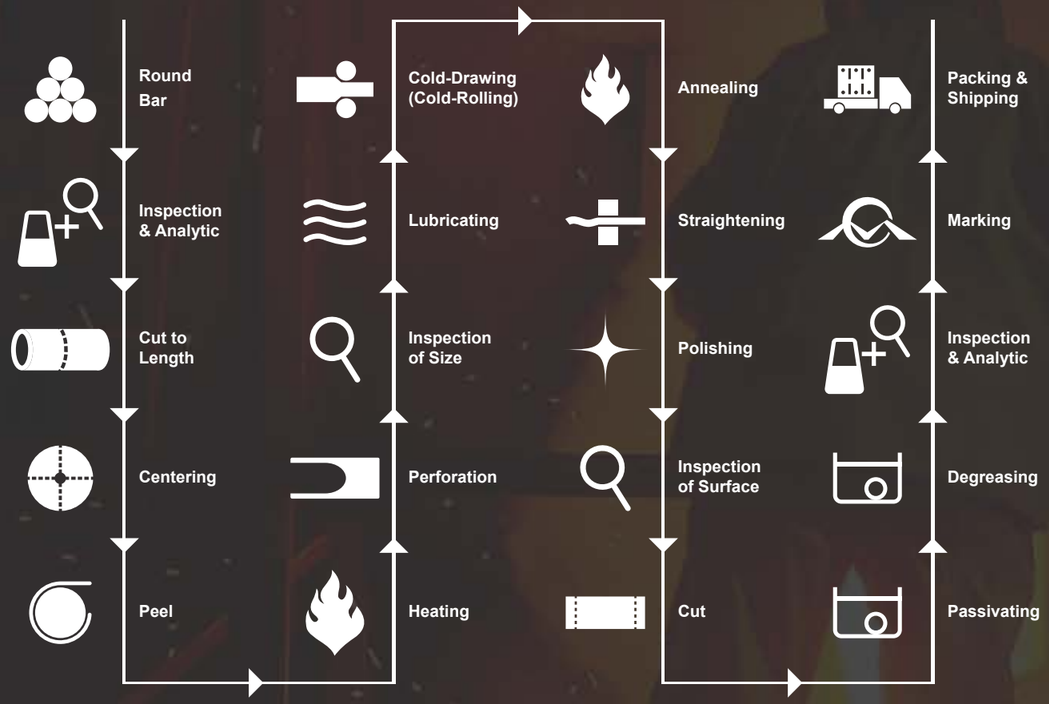
Features

Beautiful and smooth surface (400#-800#), suitable for food grade tubes and sanitary tubes.

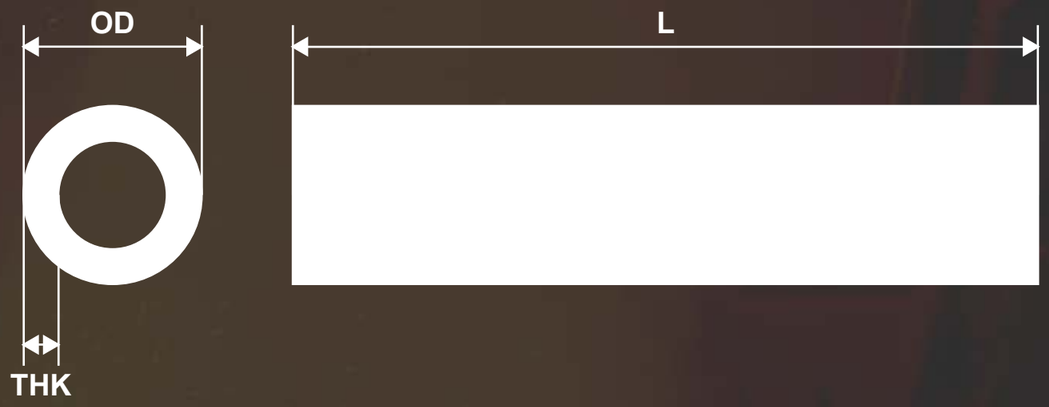
Applications

Pharmaceutical equipment, food & beverage industry, portable water, bioengineering, chemical engineering, air purification, aviation, and nuclear industry.

Manufacturing Process



Drawing & Formula



Formula:

m = (OD - THK) × THK (mm) × L (m) × 0.02491

* For 316, 316L, 310S, 309S, etc., ratio=0.02507

OD = Outer diameter, THK = Wall Thickness, L = Length

Tolerance

Size, Outside Diameter, in. [mm]	Permissible Variations in Outside Diameter, in. [mm]		Permissible Variations in Cut Length, in. [mm]	
	Over	Under	Over	Under
1.000 [25] and under	0.005 [0.13]	0.005 [0.13]	1/8 [3]	0
Over 1 [25] to 2 [50]	w0.008 [0.20]	0.008 [0.20]	1/8 [3]	0
Over 2 [50] to 3 [75]	0.010 [0.25]	0.010 [0.25]	1/8 [3]	0
Over 3 [75] to 4 [100]	0.015 [0.38]	0.015 [0.38]	1/8 [3]	0
Over 4 [100] to 5½ [140], excl	0.015 [0.38]	0.015 [0.38]	3/16 [5]	0
5½ [140] to 8 [200], excl	0.030 [0.75]	0.030 [0.75]	3/16 [5]	0
8 [200] to 12 [300]	0.050 [1.25]	0.050 [1.25]	3/16 [5]	0

Delivery State

Delivery State Choice	Surface Condition
Finish No. 80	A ground finish produced by polishing a tube with an abrasive media impregnated with No. 80 grit.
Finish No. 120	A ground finish produced by polishing a tube with an abrasive media impregnated with No. 120 grit.
Finish No. 180	A ground finish produced by polishing a tube with an abrasive media impregnated with No. 180 grit.
Finish No. 240	A ground finish produced by polishing a tube with an abrasive media impregnated with No. 240 grit.

Note: 1. If you require different deliver state than the above listed, kindly confirm with us.
2. In case of any enquiry or order, please kindly let us know any extra requirement not indicated here.

Package

In Trishul, all of our stainless steel sanitary pipes & tubes are packaged as per international standard to prevent any possible damage or loss. By default, each stainless steel sanitary tube will be packaged in waterproof plastic bag individually with pipe caps assembled at both ends, and then bundled together to be further protected with woven plastic bag. As per your request, we can also provide wooden case package or other customized package. Kindly note, wooden case can incur extra cost, not only its own cost, but also the increased freight cost, which is especially true for air transportation.

Thick woven plastic bag

Wooden case

Logistics

By default, we will quote based on sea transportation, such as FOB, CFR, CIF and the like for most enquiries or orders. Quotation based on air transportation is also optional upon your request for urgent demands.

By sea

By air

Square Pipe&Tube

Specifications

• Side Length: 4×4-300×300mm (Minimum - Maximum)
• Wall Thickness: 0.25-8.0mm (Minimum – Maximum)
• Length: 18000mm (Maximum)
• *Customized size needs to be confirmed with us

Standards

• American Standard: ASTM A312, ASTM A358, ASTM A249, ASTM A269, ASTM A554, ASTM A790
• European Standard: DIN 17457
• Japanese Standard: JIS G3459
• GB Standard: GB/T12770-2002, GB/T12771-2008

Introduction

As per your requirement, stainless steel square pipe & tube can be made into welded stainless steel square pipe or seamless stainless steel square pipe. Welded square pipe is cold bent, processed and molded with stainless steel strip or coil as its base material. Then it will be subjected to high frequency welding to become profile steel with the section in square shape. It features good comprehensive mechanical properties, hot and cold workability, corrosion resistance and low temperature plasticity. Seamless square pipe is cold drawn and extruded into the square shape, totally different from welded square shape. Stainless steel seamless square pipe is extensively used for fluid transportation.

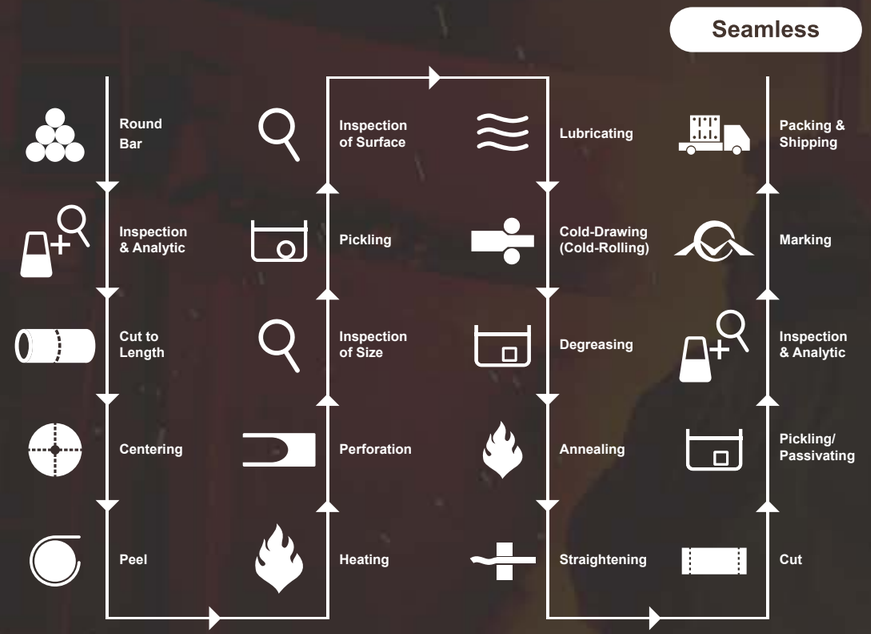
Features

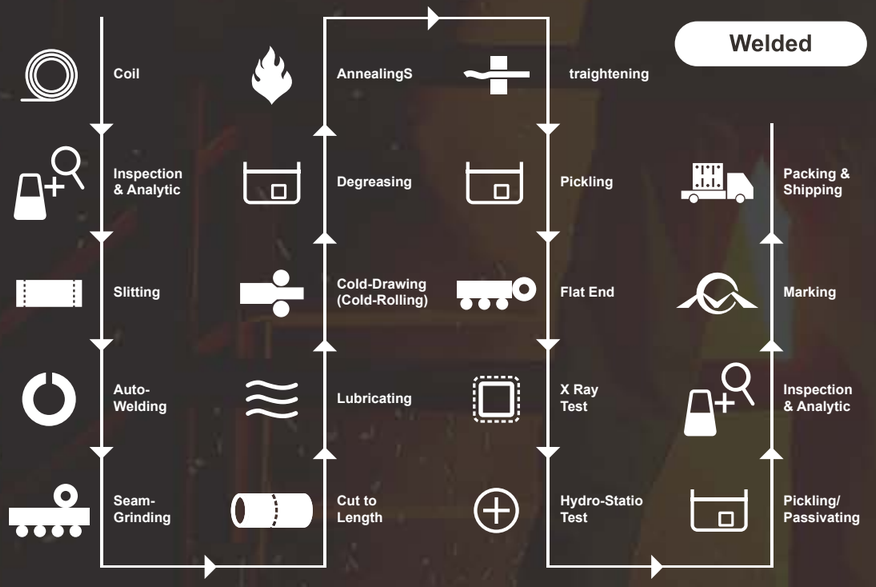
Anti-corrosion (the degree is susceptible to the alloys contained), heat-resistance, good cold and hot working properties, good toughness, good comprehensive performances and wide application.

Applications

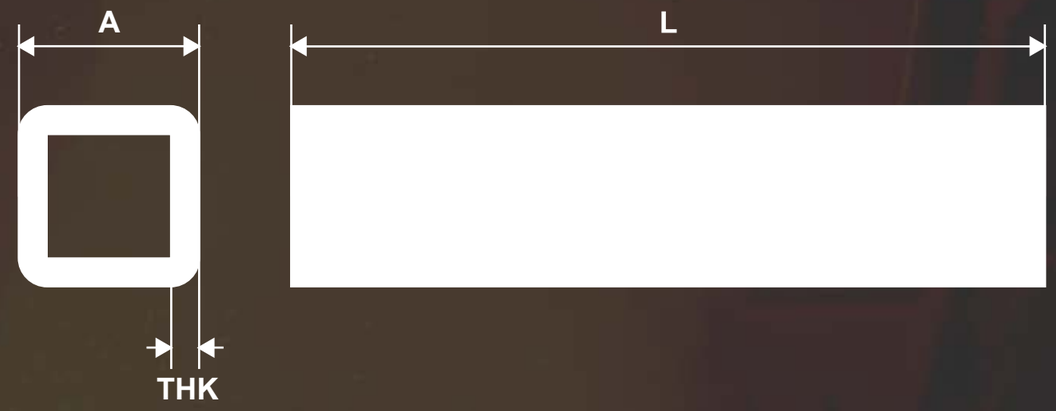
Construction, machinery manufacturing, steel construction projects, shipyard, solar stands, power plant, agriculture, mechanical machinery, airports and so on.

Manufacturing Process





Drawing & Formula



Formula:

m = (A × 4/3.14- THK) × THK × L (m) × 0.02491

* For 316, 316L, 310S, 309S, etc., ratio=0.02507

A = Side Width, THK = Wall Thickness, L = Length

Size Range

Side Width	Wall Thickness	Side Width	Wall Thickness	Side Width	Wall Thickness
12.7 x 12.7	0.4	22 x 22	0.6	38 x 38	0.9
12.7 x 12.7	0.5	22 x 22	0.7	38 x 38	1.0
12.7 x 12.7	0.6	22 x 22	0.8	38 x 38	1.5
12.7 x 12.7	0.7	22 x 22	0.9	38 x 38	2.0
12.7 x 12.7	0.8	22 x 22	1.0	40 x 40	0.6
16 x 16	0.4	22 x 22	1.5	40 x 40	0.7
16 x 16	0.5	25 x 25	0.5	40 x 40	0.8
16 x 16	0.6	25 x 25	0.6	40 x 40	0.9
16 x 16	0.7	25 x 25	0.7	40 x 40	1.0
16 x 16	0.8	25 x 25	0.8	40 x 40	1.5
16 x 16	0.9	25 x 25	0.9	40 x 40	2.0
16 x 16	1.0	25 x 25	1.0	50 x 50	0.8
19 x 19	0.4	25 x 25	1.5	50 x 50	0.9
19 x 19	0.5	30 x 30	0.6	50 x 50	1.0
19 x 19	0.6	30 x 30	0.7	50 x 50	1.5
19 x 19	0.7	30 x 30	0.8	50 x 50	2.0
19 x 19	0.8	30 x 30	0.9	60 x 60	1.0
19 x 19	0.9	30 x 30	1.0	60 x 60	1.5
19 x 19	1.0	30 x 30	1.5	60 x 60	2.0
19 x 19	1.5	38 x 38	0.6	80 x 80	1.0
22 x 22	0.4	38 x 38	0.7	80 x 80	1.5
22 x 22	0.5	38 x 38	0.8	80 x 80	2.0

Delivery State

Delivery State Choice	Surface Condition
Hot Rolled	Silver Bright
	Polished (320#, 400#, 600#, Mirror finish)
Cold Rolled	Silver Bright
	Polished (320#, 400#, 600#, Mirror finish)

Note: 1. If you require different deliver state than the above listed, kindly confirm with us.
2. In case of any enquiry or order, please kindly let us know any extra requirement not indicated here.

Package

In Trishul, all of our stainless steel square pipes & tubes are packaged as per international standard to prevent any possible damage or loss. By default, we will use thick woven plastic bag to bundle the finished pipes together in batches. However, for some special pipes that are vulnerable to dirt, scratches, stress or rough handling, we will suggest wooden case for protection. Kindly note, wooden case can incur extra cost, not only its own cost, but also the increased freight cost, which is especially true for air transportation. For enhanced customer experience, we also provide dedicated package as per your special requirements.

Thick woven plastic bag

Wooden case

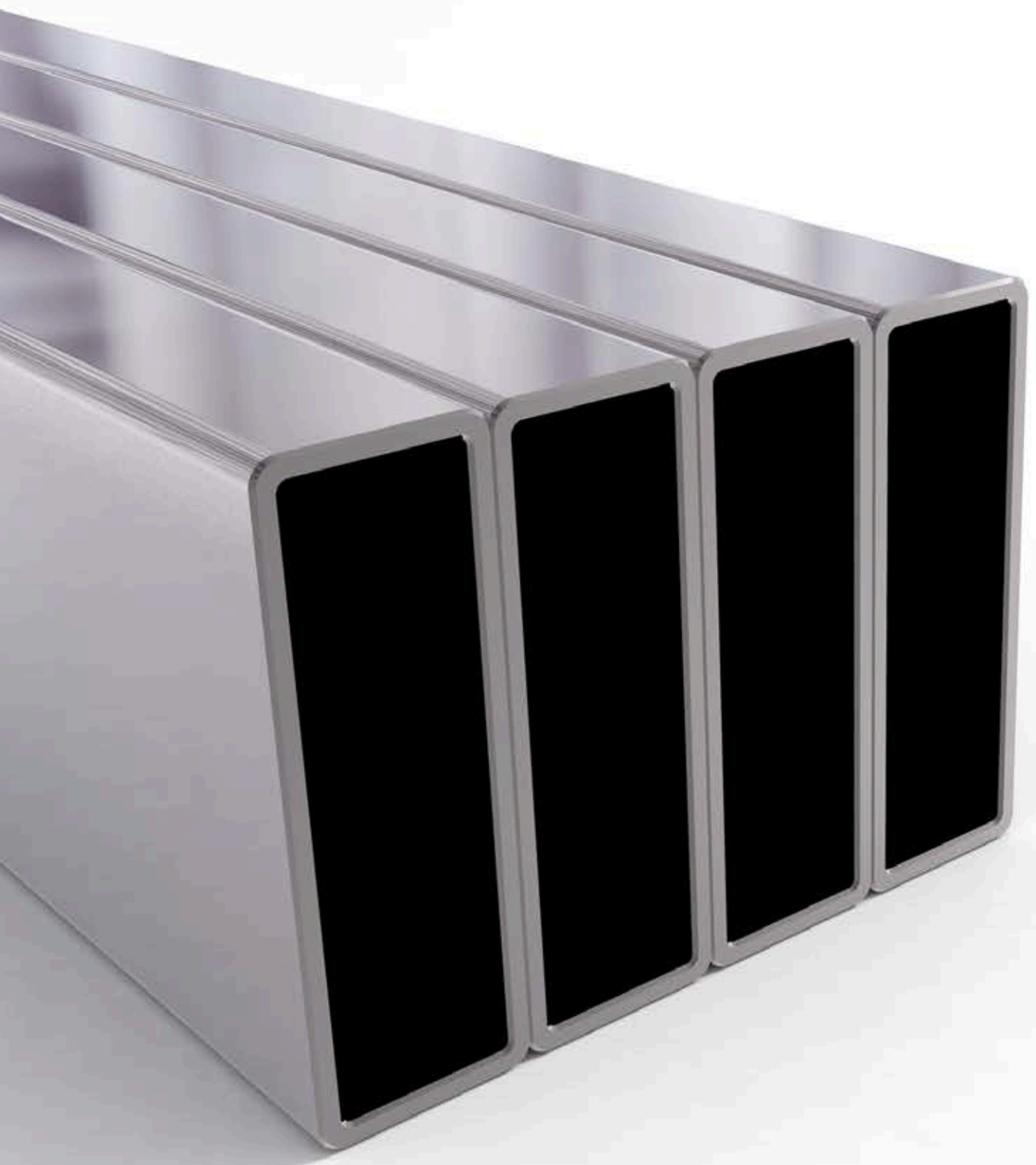
Logistics

By default, we will quote based on sea transportation, such as FOB, CFR, CIF and the like for most enquiries or orders. Quotation based on air transportation is also optional upon your request for urgent demands.

By sea

By air

Rectangle Pipe&Tube



Specifications

• Side Length: 4×6-200×400 (Minimum - Maximum)
• Wall Thickness: 0.25-8.0mm (Minimum – Maximum)
• Length: 18000mm (Maximum)
• *Customized size needs to be confirmed with us

Features

Anti-corrosion (the degree is susceptible to the alloys contained), heat-resistance, good cold and hot working properties, good toughness, good comprehensive performances and wide application

Standards

• American Standard: ASTM A312, ASTM A358, ASTM A249, ASTM A269, ASTM A554, ASTM A790
• European Standard: DIN 17457
• Japanese Standard: JIS G3459
• GB Standard: GB/T12770-2002, GB/T12771-2008

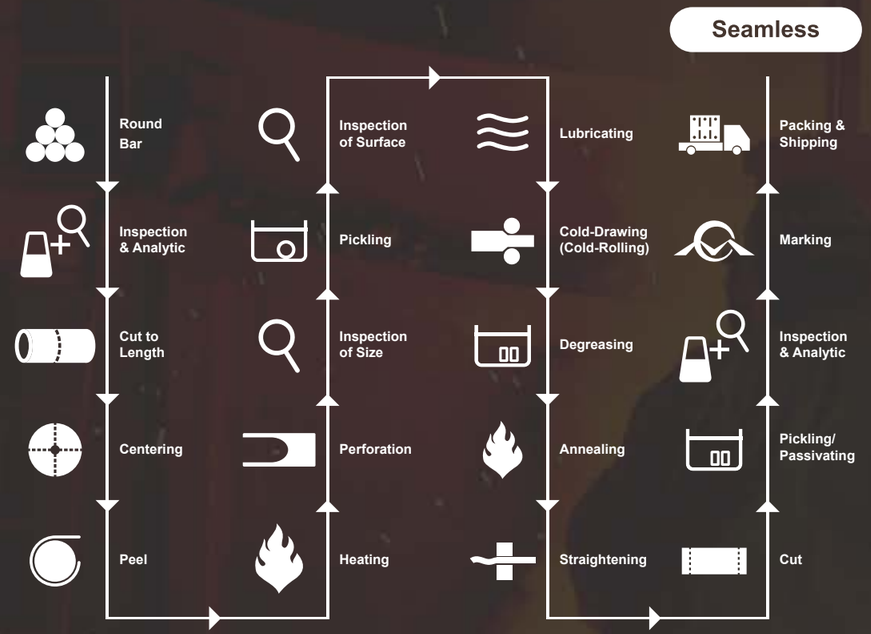
Introduction

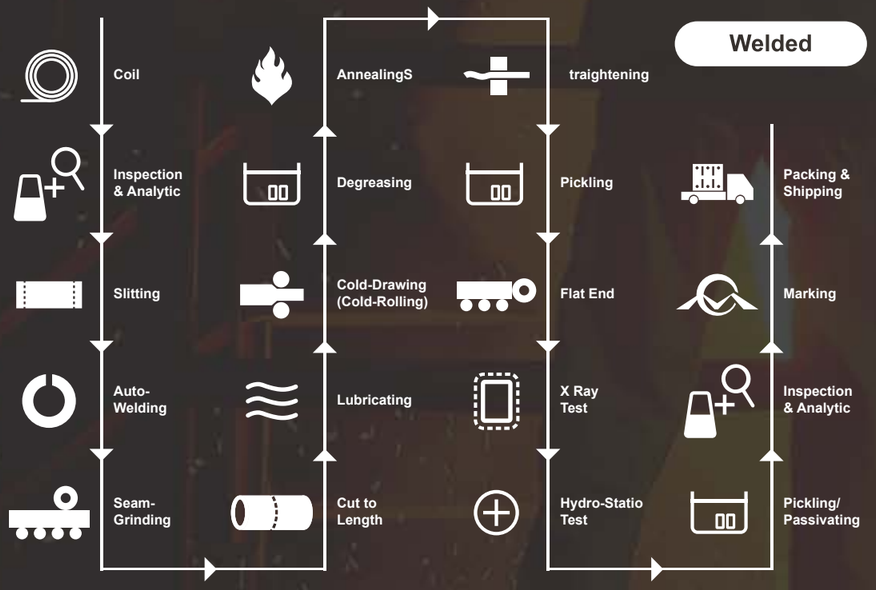
Stainless steel rectangle pipe & tube is hollow stainless steel long product and can be classified into seamless and welded by process. Seamless stainless steel rectangle pipe can be further divided into hot rolled SS pipe, cold rolled SS pipe, cold drawn SS pipe and extruding SS pipe, while cold rolled and cold drawn pipes are processed on hot rolled pipes. Welded stainless steel rectangle pipe mainly falls into two categories: straight-seam SS welded pipe and spiral SS welded pipe. Trishul produce both seamless and welded stainless steel rectangle pipe, available in multiple size and various grades as per ASTM, JIS, EN, DIN and GOST standards. The main grades of stainless steel rectangle pipe we produce are 304(L), 316(L), 321. Customization, whether in terms of grade or dimension, is acceptable so long as the quantity meets our MOQ requirement (1 Ton per size). Our stainless steel rectangle pipe is extensively used for conveying fluid medium, like oil and gas, water, steam etc. Due to its relatively lighter weight under the same bending strength and torsional strength, stainless steel rectangle tubes are also widely used in the production of machine parts and engineering structure.

Applications

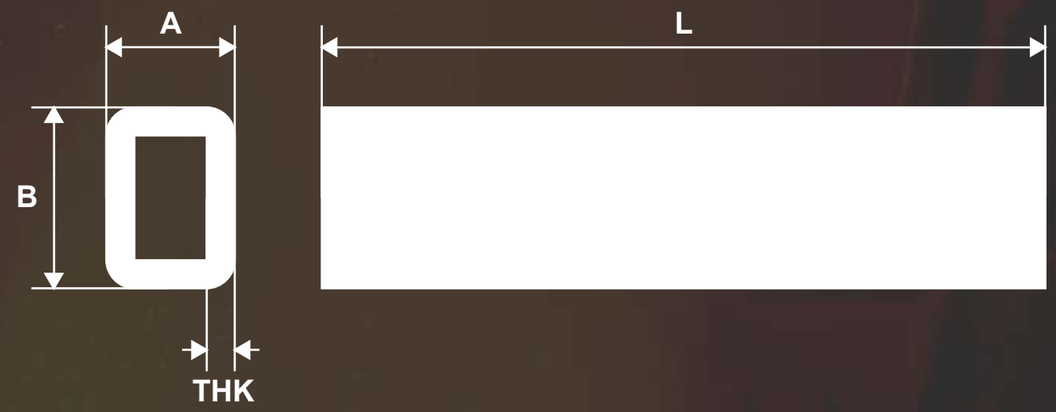
Petroleum, natural gas, fluid, steam, machinery manufacturing, steel construction project and others.

Manufacturing Process





Drawing & Formula



Formula:

m = [(A + B) × 2 /3.14- THK] × THK (mm) × L (m) × 0.02491

* For 316, 316L, 310S, 309S, etc., ratio=0.02507

A = Side Width, B = Edge Length, THK = Wall Thickness, L = Length

Size Range

Size	Size	Size	Size	Size	Size
4x6	12.7×25.4	20×150	40×50	60×100	80×125
5x8	13×25	20×200	40×60	60×120	80×140
5*10	15×25	25×40	40×70	60×125	80×150
5x12	15×30	25×50	40×80	60×140	80×160
5*15	15×35	25×60	40×90	60×150	80×200
5*20	15×40	25×70	40×100	60×200	90×100
6*12	15×50	25×80	40×120	70×80	90×110
7*38	15×60	25×90	40×125	70×90	100×140
8x5	15×65	25×100	40×150	70×100	100×150
8x6	15×70	25×120	40×200	70×110	100×200
8x12	15×80	25×125	45×60	70×120	110×130
8x15	15×90	25×150	45×75	70×125	110×150
9*17	15×100	25×200	45×95	70×130	120×140
10×20	16×32	30×40	50×60	70×140	120×180
10×25	20×30	30×50	50×75	70×150	120×200
10×30	20×40	30×60	50.8×76.2	70×180	125×150
10×40	20×50	30×70	50×100	70×200	125×175
10×50	20×60	30×80	50×120	75×100	125×200
10×60	20×70	30×90	50×125	75×125	130×170
10×70	20×80	30×100	50×150	75×150	150×200
10×80	20×90	30×120	50×200	75×175	
10×90	20×100	30×125	60×70	80×90	
10×100	20×120	30×150	60×80	80×100	
11×35	20×125	30×200	60×90	80×120	

Delivery State

Delivery State Choice	Surface Condition
Hot Rolled	Silver Bright
	Polished (320#, 400#, 600#, Mirror finish)
Cold Rolled	Silver Bright
	Polished (320#, 400#, 600#, Mirror finish)

Note: 1. If you require different deliver state than the above listed, kindly confirm with us.
2. In case of any enquiry or order, please kindly let us know any extra requirement not indicated here.

Package

In Trishul, all of our stainless steel rectangle pipes & tubes are packaged as per international standard to prevent any possible damage or loss. By default, we will use thick woven plastic bag to bundle the finished pipes together in batches. However, for some special pipes that are vulnerable to dirt, scratches, stress or rough handling, we will suggest wooden case for protection. Kindly note, wooden case can incur extra cost, not only its own cost, but also the increased freight cost, which is especially true for air transportation. For enhanced customer experience, we also provide dedicated package as per your special requirements.

Thick woven plastic bag

Wooden case

Logistics

By default, we will quote based on sea transportation, such as FOB, CFR, CIF and the like for most enquiries or orders. Quotation based on air transportation is also optional upon your request for urgent demands.

By sea

By air

Coil Tube

TRISHUL
METALS & ALLOYS
Sourcing & Procurement Solutions

Specifications

• Dimension:
Outside diameter range from 0.4 to 16mm
Wall thickness range from 0.1 to 2.11mm
Length: 150m, 1500m, 1800m, or customized
• Classification of Stainless Steel Tube Coil/Coil Tubing:
1. Flange heating tubes
2. O type
3. I type
4. W type
5. U type
• *Customized size needs to be confirmed with us

Features

Stainless steel coil tube boasts many good features as below: 1) resistance to high-temperature steam, impingement corrosion and ammonia corrosion; 2) anti-scaling, hardness to get stained, corrosion resistance to oxidation; 3) long service life, reduced maintenance time, cost saving; 4) excellent tabulation, readiness for tube change, safety and reliability; 5) uniform tube wall, 30%-50% less than the wall thickness of copper tube, superior overall thermal conductivity coefficient; 6) ideal heat exchange product for upgrading old sets and manufacturing new equipment.

Standards

ASTM A269, A249, JIS G4305, GB/T 12770-2002GB/T12771-2002, EN10216-5

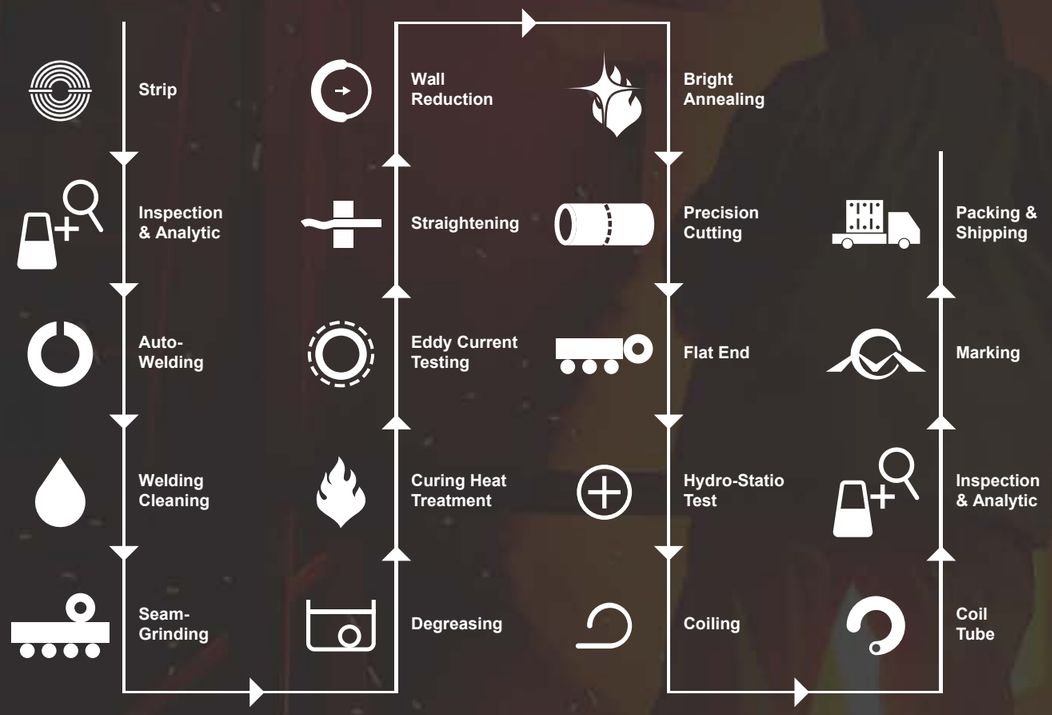
Introduction

Stainless steel coil tubes refer to those tubes with diameter ranging from 0.5mm to 20mm and wall thickness from 0.1mm to 2.0mm, for instance, pancake coil tube is such a kind. Stainless steel coil tubes are applied extensively in petrochemical industry, machinery, electronics, electric power, textile, rubber, food, medical devices, aeronautics, aerospace, communication, petroleum and other industries.
The process of bright stainless steel coil tube involves welding stainless steel strips and reducing wall thickness. With the wall thickness becoming thinner, this process uniforms and smoothens the wall thickness. Meanwhile, the drawing process for reducing pipe wall thickness gives the seamless appearance. As this process involves bright annealing, it frees the internal and external tube wall from shaping oxide coating. These tubes, bright and beautiful from both inside and outside, are exactly what medical devices need.
The SS coiled tubes are available in length at 150meters per coil for the seamless tube and 1500meters per coil for the welded tube. Kindly note, length can be customized as per your special requirement.

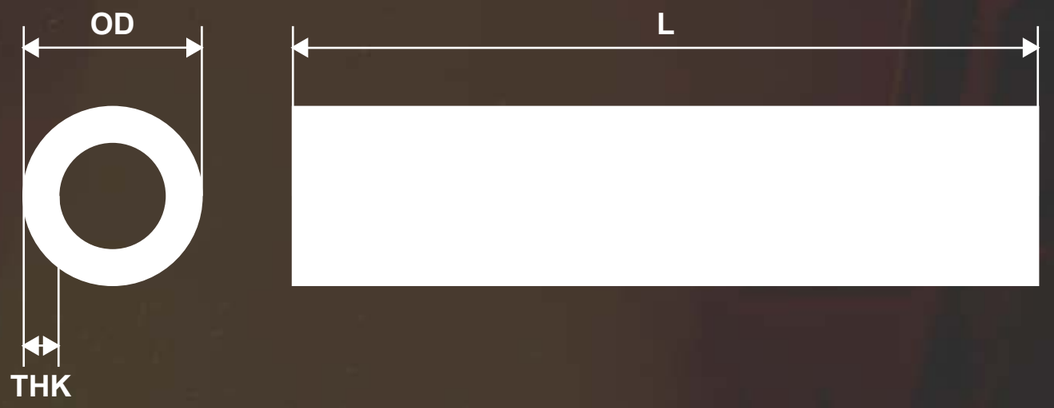
Applications

• Industrial stainless-steel coil tube: heat exchanger, boiler, petroleum, control line, chemical industry, fertilizer, chemical fiber, pharmacy, nuclear power, etc.
• Fluid stainless steel coil tube: beverage, beer, milk, water supply system, medical device etc.
• Stainless steel coil tube for machine structural application: dyeing, printing, textile machinery, kitchen equipment, auto and marine parts, building and decorations.

Manufacturing Process



Drawing & Formula



Formula:

m = (OD - THK) × THK (mm) × L (m) × 0.02491

* For 316, 316L, 310S, 309S, etc., ratio=0.02507

OD = Outer diameter, THK = Wall Thickness, L = Length

Size Range

Size	Size	Size	Size
0.4*0.11	1.6*0.15	2.5*0.75	4.5*0.5
0.5*0.15	1.6*0.2	2.5*0.8	4.5*1.0
0.6*0.15	1.6*0.25	2.55*0.13	4.7*1.0
0.63*0.15	1.6*0.3	2.55*0.8	5.0*0.2
0.7*0.15	1.6*0.4	2.6*0.2	5.0*0.25
0.8*0.125	1.7*0.15	2.8*0.2	5.0*0.3
0.8*0.15	1.7*0.25	3.0*0.15	5.0*0.35
0.9*0.15	1.8*0.11	3.0*0.2	5.0*0.5
1.0*0.1	1.8*0.125	3.0*0.25	5.0*1.0
1.0*0.125	1.8*0.15	3.0*0.3	5.0*1.5
1.0*0.135	1.8*0.2	3.0*0.5	5.5*0.2
1.0*0.15	2.0*0.125	3.2*0.2	6.0*1.5
1.0*0.16	2.0*0.15	3.2*0.5	6.0*0.8
1.1*0.115	2.0*0.2	3.4*0.2	6.0*2.0
1.1*0.12	2.0*0.25	3.5*0.2	6.35*0.3
1.1*0.125	2.0*0.3	3.5*0.25	6.35*0.35
1.1*0.135	2.0*0.4	3.5*0.5	6.35*0.5
1.1*0.14	2.0*0.5	3.5*1.0	6.35*0.7
1.1*0.15	2.0*0.7	3.5*1.2	6.35*0.8
1.1*0.2	2.1*0.5	3.7*0.2	6.35*1.25
1.2*0.1	2.1*0.55	3.7*0.25	6.35*1.65
1.2*0.125	2.1*0.65	3.8*0.2	6.35*1.8
1.2*0.135	2.1*0.7	3.8*0.25	6.35*0.89
1.2*0.15	2.2*0.2	4.0*0.2	6.35*1.24
1.2*0.2	2.2*0.3	4.0*0.25	6.35*1.65
1.3*0.1	2.2*0.6	4.0*0.35	6.5*0.3
1.3*0.11	2.2*0.8	4.0*0.4	6.5*0.4
1.3*0.12	2.3*0.2	4.0*0.5	6.5*0.5
1.3*0.125	2.3*0.25	4.0*0.7	6.5*0.6
1.3*0.15	2.5*0.18	4.0*1.0	7.0*0.2
1.3*0.3	2.5*0.2	4.2*0.25	7.0*0.3
1.4*0.15	2.5*0.25	4.4*0.25	7.0*0.5
1.4*0.2	2.5*0.3	4.4*0.4	7.0*1.0
1.4*0.25	2.5*0.4	4.5*0.2	8.0*0.2

Size	Size	Size	Size
1.45*0.1	2.5*0.5	4.5*0.25	8.0*0.5
1.5*0.125	2.5*0.55	4.5*0.3	9.52*0.89
1.5*0.15	2.5*0.6	5.5*0.25	9.52*1.24
1.5*0.2	2.5*0.7	5.5*0.3	9.52*1.65
1.5*0.25	3.0*0.6	5.5*0.5	9.52*2.03
1.5*0.4	3.0*0.7	5.5*1.0	12.7*1.24
1.55*0.325	3.0*0.9	6.0*0.15	12.7*1.65
1.6*0.1	3.0*1.0	6.0*0.2	12.7*2.03
1.8*0.25	3.0*1.2	6.0*0.25	15.88*1.24
1.8*0.4	3.1*0.55	6.0*0.3	15.88*1.65
1.9*0.15	3.18*0.71	6.0*0.5	
2.0*0.1	3.18*0.89	6.0*1.0	

Delivery State

Delivery State Choice	Surface Condition
AP: Annealed and Pickled	Pickled
MP: Mechanically Polished	Polished
BA: Bright Annealed	Bright
EP: Electro-Polished	Polished

Note: 1. If you require different deliver state than the above listed, kindly confirm with us.
2. In case of any enquiry or order, please kindly let us know any extra requirement not indicated here.

Package

In Trishul, all of our stainless steel coil tubes are packaged as per international standard to prevent any possible damage or loss. According to your particular demand, our package can be knitting strip bundling, waterproof woven plastic bag, wooden pallet, wood reels, wooden box. We can also provide dedicated package as per your special requirements.

Thick woven plastic bag

+

Wooden pallet

Wood Reel

Wooden case

Logistics

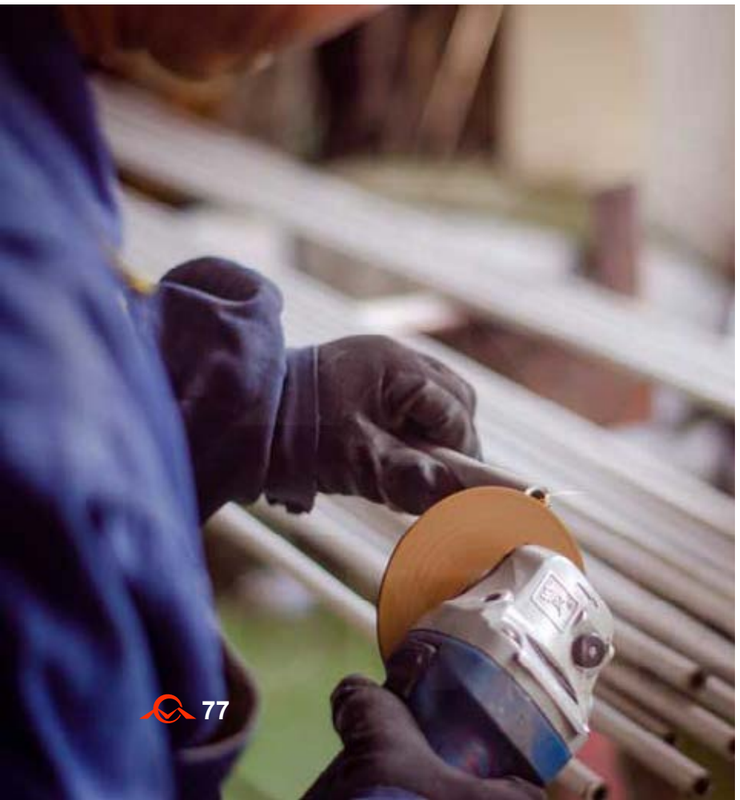
By default, we will quote based on sea transportation, such as FOB, CFR, CIF and the like for most enquiries or orders. Quotation based on air transportation is also optional upon your request for urgent demands.

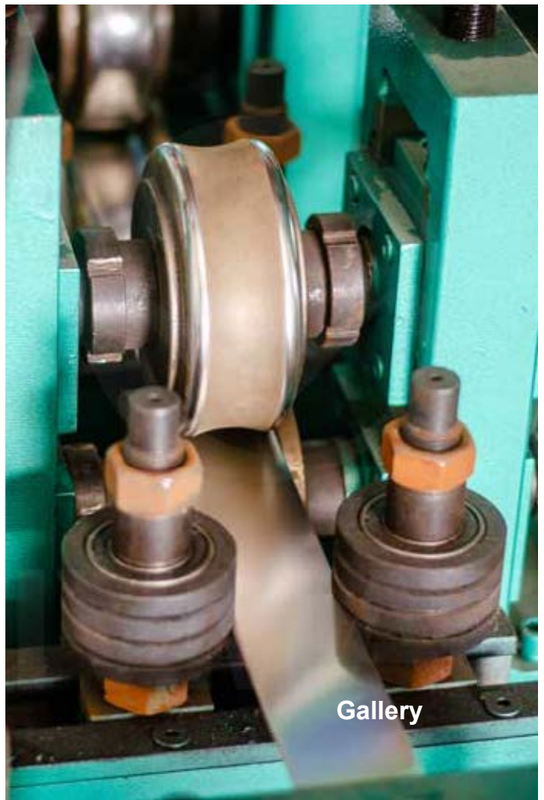
By sea

By air

TRISHUL
METALS & ALLOYS
Sourcing & Procurement Solutions

Gallery





Gallery

FAQ

Q: Can you process SS seamless pipes into polished finish?

A: Yes, for stainless steel seamless pipe, polished finish is also available, like simple rough polishing. For precise polishing, we can polish the pipes to # 240 and # 320 as per your demand. Stainless steel sanitary seamless pipe is such an example. By default, SS seamless pipe features pickled finish as many of our photos illustrate.

Q: What is the standard length? Can I have the tubes/pipes cut into the length I want?

A: Our standard length of SS pipe is 5.8m or 6meter for most overseas orders. We can also make the pipe length as long as 12 or 13 meters for your reference.

Yes, we can cut pipes into the length you want, but this can incur extra cost. In case of order, please also indicate the cutting method you prefer. We have laser cutting, plasma cutting and water-jet cutting for your options.

Q: Do you also have SS pipe fittings?

A: Yes, we have, like elbows, flanges, reducers, etc. For detailed information, please kindly refer to our product.

Q: Where's your main market?

A: South America, South-East Asia, Middle-East, Europe and so on.

Q: What's your package for SS pipe?

A: By default, our package is thick woven plastic bag, but we also provide wooden case or dedicated package as per your requirement. You can also refer to our pictures for better understanding.

Q: How long is your delivery time of SS welded tube?

Normally, it takes two weeks for us to complete production of SS welded tube for order quantity less than two containers, but the delivery time might also be influenced by other factors such as special grade, special size, large quantity of the product itself, or some force majeure.

Q: What’s the finish of your stainless steel square pipe?

A: For industrial application, the finish of our stainless steel square pipe is No.1 or pickled finish. We can also do polished SS square pipe, like 320#, 400# for your specific requirement.

Q: Do you have seamless stainless steel rectangle pipe?

A: Yes, we have. Our stainless steel rectangle pipe is available in both processes: welded or seamless for your specific requirement.

FAQ

Q: What's your SS coiled tubing process?

A: Either of the two: 1)TIG welded and cold drawn 2)Seamless and cold drawn.

Q: What's the difference between stainless steel sanitary tube and stainless steel industrial tube?

A: Stainless steel sanitary tube is either SS seamless tube or SS welded tube in terms of process. SS sanitary tubes are usually required to get polished both inside and outside so that the inside pipe wall will be smooth enough to prevent water pollution caused by accumulated residuals. Sanitary stainless steel tubes are the ideal pipe material for city water supply system, desalination, gas transportation and the like.

In contrast, industrial stainless steel tubes are pickled and passivated both inside and outside, possessing good features like reliability, security, and economy. Industrial SS tubes, used as underground pipes and long-distance pipelines, feature light weight, high strength, corrosion resistance and long service life.

Q: What's the standard package for your SS sanitary tube?

A: Each stainless steel sanitary tube will be packaged in waterproof plastic bag individually with pipe caps assembled at both ends, and then bundled together to be further protected with woven plastic bag. As per your request, we can also provide wooden case package or other customized package.

Q: What standard do you follow for the thick-walled SS pipes?

A: The common standard for stainless steel thick-walled pipe or stainless steel hollow bar we follow is ASTM A511. Unlike fluid-carrying seamless tubes, these SS thick-walled pipes are for use in mechanical applications or as hollow bar for use in the production of hollow components such as, but not limited to nozzles, reducers, and couplings by machining where corrosion-resistant or high-temperature strength is needed.

Q: How many delivery states do you have for SS capillary tubes?

A: We have 4 delivery states for your choice: Annealed and pickled (AP), Mechanically Polished (MP), Bright Annealed (BA) and Electro-polished (EP).

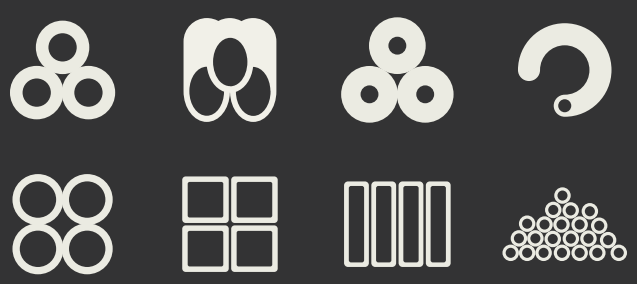
Q: What's your standard package for EP tubes?

A: For our EP grade stainless steel tubes, both ends of the finished tubes are protected with PA film and rubber tube caps. Anti-static bags are also used to further protect these tubes. At last, they will be placed into the wooden case.

Q: Which capillary tubes are the most popular?

A: BA grade and EP grade 316L capillary tubes are the most popular tubes at home and abroad. The most applied standard is ASTM A269 for your reference.

Procurement & Soucring Solutions



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